Designing in Creativity: An Investigation into the Role of Creativity in Graphic Design

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Abstract

Graphic design practice is currently entrenched within a process-driven, formulaic approach to design that is time constrained and closely aligned with the working practices of the business environment. This approach is not conducive to creativity. Although design institutions recognise the call from UK governments for increased creativity and innovation in support of economic, social, and cultural initiatives the current commodification of knowledge, developed in response to the needs of business and industry, has its limitations. There is today a tension in the academic community between the pursuit of creative practice as a valuable entity in itself and the preparation of graduates for employment. There is a growing concern within the industry at the educational marginalisation of creativity within the design process in an attempt to remain current with technological and professional skilling.

The intellectual and theoretical underpinning of graphic design is weak with little scholarly debate in relation to creativity and critical thinking. The aim of this research therefore is to support future practice and educational initiatives by developing a new theoretical and contextual framework from which to engage with both industry and education. Utilising a mixed method approach together with the insider/outsider status of the researcher working as both a design practitioner and design educator the research addresses the following questions: what is the role of creativity in graphic design? Why is creativity important to graphic design education and industry practice? How can creativity be facilitated within graphic design education and industry practice?

A small-scale qualitative online survey was conducted initially in the form of a targeted emailed questionnaire. It collected opinions, knowledge, and experiences from 9 universities within the UK Higher Education sector and a small number of industry practitioners. The aim was to gain insights from a cross-section of individuals most likely to have special knowledge about the research topic and provide a snapshot of how things are currently. The study built on these insights by considering creativity in different contexts and demonstrates through substantial critical investigation and analysis the theoretical and contextual knowledge underpinning discussions in relation to creativity. It explores the significance of creativity as a term and an activity in

graphic design. It examines possible explanations for the marginalisation of creativity in graphic design by looking at the historical precedents for the split between the fine and applied arts and the impact that this has had on the way that design has been taught and practiced. The findings confirm that understanding the role of creativity within practice is fundamental to ensuring that graphic design remains relevant in twenty first century culture and society. However, what creativity is and the various forms it can take may be different to what is currently recognised by education and industry practice.

Table of Contents

Foreword

This thesis is about the role of creativity in graphic design and the significance of critical thinking skills in the development of creativity in practice. It addresses the issue of how creativity is considered in the context of graphic design. Utilising a mixed methods approach including observational analysis the thesis reflects on my own experience of looking back over my career. It considers the issues that are pertinent to the development of creativity and critical thinking within graphic design and the opportunities and challenges that face individual designers engaged in practice. The aim is to show and reflect on why the acquisition of creative and critical thinking skills required in practice appear to be approached inconsistently within university education and what the key issues affecting creative abilities are.

As an academic and practitioner in graphic design for over three decades I have worked with students and graduates from a variety of design disciplines. Having worked within four HE institutions as an academic I have experienced inconsistency in terms of how creativity and critical thinking is viewed and facilitated within design education as opposed to what practitioners consider the creative content of their domain. There is a direct correlation between what design academics consider creativity and its role in graphic design to be and what is taught. There is a strong bias towards style and visual embellishment at the expense of more creative problem solving. The creative and critical thinking abilities of students and graduates entering industry is therefore also inconsistent. Views expressed during informal conversations with colleagues within both my academic and industry practice also acknowledge there is an over-reliance on visual aesthetics over creative problem-solving in graphic design. They attribute this to either a complete absence of focus on the topic of creativity and what it means to be creative or an imbalance in skill sets. One academic colleague, Dr Alke Groppel-Wegener[1] (Staffordshire University, 2020) commented that:

[1] Dr Alke Groppel-Wegener is Associate Professor of Creative Academic Practice, Programme Leader Master by Negotiated Study and Senior Lecturer in Contextual Studies, Staffordshire University.

> I teach within art and design subjects and…I have always assumed creativity as something that is there, rather than specifically teaching it… I don't teach my students how to be creative, I have always assumed they are, less because they are art and design students and more because I think everybody can be creative if given the encouragement to explore…I believe that what often happens is that we [academics] assume that creativity is inherent in design students and therefore don't necessarily address it which might mean that it is assumed and not taught.

Gary Botten[2] (Verso Creative, 2020), an industry colleague, stated that:

> I use graduate and junior graphic designers for their digital skilling and production capabilities preferring to work directly with clients and other discipline professionals in the development of strategy and creative ideation. This is because graduates generally do not enter industry with a broad professional skillset that enables them to interact effectively with other specialists. Only later, with more industry experience, do graphic designers develop critical and strategic thinking skills. I play to their strengths as graduates and this frees me up to work on creative ideation.

The thesis reflects the growing realisation within the design community that the topic of creativity is important, under researched, and needs to be addressed if graphic design is to remain fit for purpose within twenty first century visual communications. A small number of design writers have acknowledged this in their own commentaries however as design writing is generally uncritical the issues have yet to be adequately addressed. Understanding the reasons behind established views and the consequent inconsistency in student ability is therefore paramount if the role of creativity is to be addressed.

My career as both a full-time practitioner and subsequently full-time academic in design is unusual. In graphic design very few industry practitioners with twenty years experience become full-time academics. Having practiced extensively and across a diverse number of design disciplines has provided me with a unique perspective from which to consider creativity within graphic design. Significantly, my career can be mapped against the development of graphic design as it is understood today. I have experienced first-hand the key initiatives and issues that have shaped practice and impacted the creativity and critical thinking skills associated with the discipline. For example, the change from analogue to digital practice. Through the process of reflective research this thesis documents, analyses

[2] Gary Botten is currently Partner and Creative Director at Verso Creative - a design and branding agency, Staffordshire West Midlands. Formerly Creative Director in the Cadbury Design Studio - Cadbury UK, Bournville, Birmingham.

and reflects on these initiatives and issues in relation to creativity and the discipline and practice of graphic design. It provides a new theoretical framework from which to consider graphic design practice in the future. It presents a theoretical and contextual overview of both education and industry providing key arguments for the development of graphic design education through the development of curriculum and design pedagogy. In doing so the thesis contributes to new knowledge in terms of the future development of graphic design education and practice.

Graphic Design as it is recognised today developed in the early part of the twentieth century. Before this it was referred to as Commercial Art and practice was about surface embellishment rather than problem solving. Historically Visual Communication can be traced back to Antiquity however, this is not graphic design as it is understood today. Unlike other disciplines for example, fine art, architecture, music or literature, graphic design has developed with little theoretical or contextual reflection academically or in practice. Its evolution in terms of practice has been piecemeal with an emphasis on discussions around subsets within practice such as the development of typefaces or commercial symbols. However, these are discussed without the significant critical evaluation that we might expect from discourse within other disciplines within the arts.

From its emergence in the early nineteenth century until the present-day creativity in graphic design has been invariably discussed and evaluated in terms of the surface embellishment of designed artefacts or the successful adaptation of the visual solution to a number of different formats for example, a design that works across a brochure, posters, and a website. This continues to be the prevailing view. However, this emphasis on the purely visual, and the lack of significant critique within the discipline, has led to a view by many that graphic designers are stylists who lack intellectual depth. It also overlooks other issues that are significant to practice for example, the appropriateness of a solution to the original brief, the importance of creative ideation in visual communication, the effectiveness of the solution in terms of user experience and the impact that the visual communication has made towards attitudes and ideas within society. The aim of most graphic design is to visually solve the problem of a client or user need. However, the solution to a need is not to produce a piece of visual communication but to modify or change the user's attitudes

or abilities in relation to this need in some way. For example, persuading consumers to switch from one brand of coffee to another, confirming the health benefits of eating more fresh fruit and vegetables, or clarity in understanding of how to navigate a complex building through effective signage. Whilst the visual appearance of the design solution to these might be aesthetically pleasing the measure of its success is in terms of the creative quality of the problem solving involved.

Experience from my own practice confirms that creativity in graphic design is more than the visual response to a client brief. Significantly, practice also requires creative problem-solving in the formulation of ideas. This necessitates the acquisition of knowledge, skills and experience outside the immediate domain of design in order to provide context and greater frames of reference in which to situate ideas. Following are four examples taken from my industry and academic practice. They show the role of creativity within graphic design and explain its added value in a given context. In each case one example demonstrates added value, the other demonstrates the issues involved when critical thinking is not applied.

Example: Creative problem solving in Industry Practice

While working for a large UK based confectionary company (2005-2010) the design team received a point of purchase (POP) brief from the marketing team. It required the issue of sustainability in the provision of POP material to be considered. Consumers were beginning to voice concern about the amount of cardboard wastage within packaging material. POP material is always supplied to individual stores in a cardboard box which is thrown away after delivery. In order to effectively re-design the POP material the team had to understand the retail environment, manufacturing constraints, working within a supply chain, health and safety issues in relation to the delivery and display of food products and how sustainability issues might be addressed in this context. The creative solution utilised the delivery carton as part of the assembled POP negating the need to throw away any of the delivery packaging. This was a completely new approach and was subsequently taken up by many competitors and manufacturers. Practice has therefore shown that knowledge outside the immediate domain and wider contextual experience are paramount in the development of creative ideation. Invariably a new idea comes from the

juxtaposition of two seemingly random or unrelated ideas creating something new and innovative. Equally, in this example the designers had to work with other professionals outside their immediate discipline of graphic design such as marketing and sales managers, retail store managers and the food manufacturing and printing industry. Acquiring this level of knowledge necessitates the ability to work with others outside the immediate domain of design and the ability to engage critically with other professionals.

Example: Lack of creative problem solving in Industry Practice

By contrast, a narrow perspective in terms of knowledge and experience limits the potential for making connections between things and engaging in the problem-solving activity which underpins graphic design as practice. For example, whilst at the same company, the graphic design team were briefed by the marketing team to produce sales promotion literature. This would be used by sales staff when visiting regional stores. The designers did not interrogate the client brief in order to understand who the intended audience were or how the materials were being used but relied on the information provided. This oversight eventually demonstrated that the marketing team were not entirely aware of how the sales teams used promotional materials in their sales activities. Critically, the designers also utilised existing graphics and imagery taken from the company's image bank – a library of images developed over many years and available to all staff. The outcome was generic looking materials, utilising previously seen images, that did not work as a selling tool for the sales staff because it did not provide differentiation with competitors. It was also not identifiably different to previous sales literature. The messages regarding new products and initiatives contained within the literature were lost within the corporate branding exercise applied to the design.

Whilst University education provides some level of theoretical and contextual knowledge and cross-disciplinary activity outside the immediate discipline of design this has been developed in an ad hoc way. It has been more successfully addressed by subsets within the field of visual communication such as advertising and brand management or interactive media than by the pure graphic design practitioners. It is invariably treated as a 'bolt on' by both academics and students. Rarely is it

embedded within the core design curriculum. Often it is presented from a particular perspective such as the acquisition of 'professional skills' which are by definition vocational rather than intellectual in nature. During my academic practice in higher education, I have tried to engage with students and fellow academics in cross-disciplinary and multi-disciplinary design activities utilising live client briefs provided through industry contacts. However, whilst some students and academics from disciplines such as advertising and interactive media embraced this approach the graphic design students and full-time academics were uncomfortable in this environment.

Example: Creative problem solving in Academic Practice

Graphic design students in one university were briefed by a ceramics company (2013) to produce their corporate brochure in line with their corporate identity. Whilst this was familiar territory for the graphic designers the part-time academic/practitioner ensured the students engaged with the positioning research and competitor information provided by the client through their strategy document. This provided the students with a greater understanding of the client business leading to more targeted printed literature that did not rely on replicating the visual assets associated with the corporate identity. The students were empowered to the point that they utilised their own purpose-specific photography and themes in response to the brief, enhancing the client brand values by developing a further level of sophistication in the content of the materials.

Example: Lack of creative problem solving in Academic Practice

Graphic design students were approached by the same ceramics company (2012) to supply a positioning for the brand, a new corporate identity and promotional literature. The brief provided scope for multi-disciplinary activities and learning opportunities. The initial design briefs required competitor and consumer research in order to provide a strategy for the brand positioning. Whilst the advertising and brand management students understood fully what was required and were able to discuss and evaluate their findings with the client, the graphic design students waited for the outcome of the client strategy discussions before engaging with the requirements of the brief. In effect, they had absolved themselves from any

responsibility for the design outcome beyond the visual aesthetics of the final route established with the client. Both the students and the academic staff considered the strategy and positioning of the client business to be outside their remit, knowledge, and abilities in terms of the skillsets they were acquiring through their studies. However, there are pockets of good practice in graphic design education and these often come through interactions with industry and briefs set by part-time academics who are practitioners in their own right.

Current issues within the Academic sector in Graphic Design

In the main the real value of theoretical and contextual knowledge to the successful development of creative ideation skills is either underestimated or misunderstood within academic practice. In academic practice graphic design continues to be evaluated in terms of visual aesthetics and stylistic conventions rather than the quality of the creative thinking that underpins it. This is the polar opposite of how graphic design is evaluated in industry practice. What is currently being asked of graphic design students is not demanding enough or rigorous enough to deal with real world issues. If as a vocational discipline the role of graphic design is to meet the needs of society in some form, then measuring the quality of its success purely in terms of visual aesthetics misunderstands the role and value of creativity in practice. In the main, industry practice recognises this however, design education is slow to acknowledge other forms of creativity in practice and this is evidenced by the way students engage with and discuss their own work and creativity. My experience of the graphic design curriculum as both a student and academic practitioner is that it has evolved to meet the needs of what is essentially a vocational practice with emphasis on the practical considerations required by industry. Initially taught through Polytechnics (1970s) the graphic design curriculum was clearly vocationally defined and systematised. However, when Polytechnics were permitted to apply for University status (1992) this initiated a less structured format for learning and teaching without any formal protocol to follow. Vocational courses turned into academic courses with Universities setting their own standards and format underpinned by the expertise of their staff. The academic quality of individual courses therefore was directly influenced by the academics engaged to teach. There is a direct correlation between successful courses and the academics involved that

can be evidenced by the rise and fall in reputation of a particular institution due to key academics moving around within the sector. This would not be the case if successful course content and approaches to learning and teaching were standardised rather than due to the engagement of individual academics. The issues now associated with curriculum difficulties in graphic design can be attributed to this transition from purely vocational skilling to the need for a more academic approach to learning and teaching. Whilst the discipline of graphic design has become a University level subject and therefore by definition requires a theoretical underpinning the reality is that there are few academics with an appropriate background and theoretical critical thinking skills to address this. Graphic design academics are invariably chosen because of their industry experience and as their own academic background did not substantially contain theoretical and contextual underpinning, they are not in a position to change this. My own academic practice has confirmed that many graphic design academics are intransigent when it comes to developing new approaches within their teaching and the issue therefore in the main goes unaddressed. The lack of critical thinking skills in today's graduates perpetuates this dilemma as they will go on to become the practitioners of tomorrow. Finding a balance between creative and critical thinking and practical vocational skills in higher education today is a challenge that requires resources from outside the immediate discipline of graphic design. This is not an impossible task, indeed there are examples of other vocational practices that have moved to more academic approaches to learning and teaching due to the requirement within the discipline for professional accreditation, Nursing and Midwifery for example or Architecture within the design disciplines.

Throughout my education and professional practice my creativity and critical thinking skills have been honed as part of the process of designing. However, I recognise that creativity and the mechanical process of design is fundamentally different. The distinction between creativity and design as style and surface embellishment has become blurred with academics and practitioners discussing the design process as a creative process. In graphic design the term creativity has not been adequately interrogated and creativity is difficult to measure or attribute without parameters. The terms design and creativity are therefore used interchangeably. For example, designers who are very skilled in the mechanics of

how a design looks may consider themselves creative. Equally, designers who develop successful commercial designs by evaluating the content of the brief in order to provide insight, understanding and emotional connection will see themselves as creative. What follows is an overview of my career to date with a view to explaining why this might be the case and therefore why I have chosen this topic for my research.

My Graphic Design Education

My design education (Ravensbourne College of Art 1980-1983 and Central School of Art 1983-1984) reflects the integrated Bauhaus teaching model utilising the International Typographic Style. The facilitation of design and creative skills was therefore holistic in nature. Critical thinking skills were developed through exposure to other arts and humanities disciplines and practice as part of the curriculum. Study throughout was complemented with a strong contextual contribution and as such my education was not systematised but fluid and liberal within the context of the art school. Higher education had not yet adopted the modular system utilised today which is both systematised and specialised in nature. Project work was evaluated in terms of aesthetics, form, and clarity as a piece of communication. It would have been impossible to assess its impact in the real world because there were no commercial parameters provided as part of the design brief from which to evaluate the work. For example, consumer data or market research. The design tutors reflected the design culture at this time with broad, liberal, and varied backgrounds utilising this wider contextual background in their teaching. Whilst practice and the learning of necessary craft skills underpinned the curriculum, theory and the development of intellectual skills including critical thinking were taught. I was encouraged to immerse myself in subjects not immediately or obviously associated with design such as philosophy and sociology. Professional skills were not addressed as students were expected to learn these on entering the industry. The reality however was that I was not industry ready on leaving University, an issue that would be addressed by institutions of Higher Education decades later.

My Industry Career

My early career began in 1984 within 'in-house' design studios for a number of large corporate companies based in London. The International Typographic style had already been significantly adopted within corporate literature at this time. Typical projects included corporate identities and branded sales and promotion literature. Practice was analogue with designers working in extended production teams. My education had prepared me to create work within a commercially viable style. However, it had not prepared me in terms of how design is produced, creativity facilitated within an agency environment, the procedures and processes supporting this, or how to deal with clients. These professional skills were learned from more senior designers, other agency staff and clients. The agency environment introduced me to other skills and disciplines including marketing, market research, ethnographic research, focus groups, shopper/user behaviour, qualitative interviewing etc. Understanding these enabled me to recognise the importance of my own skills in terms of design and creativity and improve them within the context of the commercial environment. It also enabled me to recognise that creativity within a project may come from the interaction with others outside the immediate domain of design. These individuals were often the catalyst for new ideas or supported the development and validation of creative ideas through critical evaluation using evaluation methods taken from their own disciplines. By the early nineties, the entire design and print industry had moved to digital production necessitating the need for designers to use the Apple Macintosh computer and its associated software. The change in the design process and therefore modes of creativity was severely impacted with designers working within their own digital competencies. Having a broad educational background and skillset facilitated my ability to move around within the industry and later to undertake more diverse roles. Some of these were not immediately and obviously engaged in creativity and critical thinking. However, in becoming immersed in other associated disciplines that complemented the role of the designer, I began to recognise the potential for creativity through the critical thinking associated with them. These associated disciplines included marketing, branding, consumer, and end user research.

My Academic Career

In 2010 I began part-time teaching in UK Higher Education across several universities briefing and assessing industry-based projects alongside full-time design educators. I observed that whilst there were pockets of creative practice within the sector in the main this was not the case. The graphic design curriculum varied considerably across institutions. The design disciplines had become more specialised due to the digitisation of the industry. However, digitisation of the specialist activities associated with analogue design led to the individual designer now taking responsibility for all aspects of the design and production role. This allowed less time for creative ideation and critical thinking amongst both professional and student practitioners. The emphasis within student design projects was in mastering digital skills and activities associated with professional practice and not in the facilitation of creativity. Higher Education had become modular and the multidisciplinary activity I had experienced in my own education could no longer be accommodated within the curriculum. The focus in education had obviously changed direction and emphasis on new skill sets was apparent. There was a lack of awareness of the significance of contextual studies on practice and no fixed model to follow in embedding it within practice. Students appeared to have little experience of ideas or knowledge outside their own domain which both myself and the academics involved considered had a detrimental effect on their creativity and critical thinking skills. Teaching part-time introduced me to current learning and teaching initiatives in the context of design pedagogy which for me raised the question of the nature of creative practice. In evaluating the design curriculum, I became aware of the imbalance of skillsets within the discipline and observed the detrimental effect this had on student creativity.

In 2012 I became the Award Leader for the MA in Design Management at Staffordshire University and was immediately tasked with the re-validation of the award. Engaging with course validation and the re-writing of course documents introduced me to the issues surrounding HE provision and pedagogy. In particular, issues such as quality assurance, widening participation, curriculum development and assessment practices. It also re-emphasised the issues surrounding modularity and the inflexibility of this approach in terms of multi-disciplinary teaching and advocating that students engage in subjects and activities outside their immediate

discipline. Both of which I consider to be critical in facilitating creativity within graphic design. I also taught professional practice modules across a number of subjects as part of their contextual studies including, product design, advertising and brand management, digital media, illustration, ceramics, and fine art. Teaching was at both undergraduate and postgraduate level. Against my better judgement, professional practice was taught theoretically rather than being embedded within subject curriculum. This led to students considering professional practice skills as something 'other' to the detriment of their practice.

Throughout its evolution as a discipline the environments in which graphic design has been practiced have changed rapidly and extensively. Practitioners within both education and industry have had little time or opportunity to consider the implications of these changes in terms of practice. Practice has therefore developed in an ad hoc and piecemeal way. As such important aspects of practice, including the role of creativity, have either been side lined or forgotten as practice has become increasingly business focussed. This research addresses the gap in knowledge and understanding by reasserting the significance and value of creativity within practice.

Introduction

As digital technology has become commonplace within the graphic design industry there has been a growing perception that alternative approaches to design education has led to an incomplete understanding of the development of creative ideation and critical thinking amongst graduates. For example, both Daniel Weil (1996, p.5) from *Pentagram Design* and Neville Brody (B Gibson, 2011) express concern that technological development has been at the expense of creativity and critical thinking. Design practitioners, writers, critics, and educationalists all argue that there is now an imbalance in skill sets from designers entering the industry that is directly affecting the extent of their creativity.

There are many issues influencing approaches to design education. Some are due to government led initiatives such as the widening participation schemes discussed by Lindsey Marshall and Lester Meachem (2005, pp. 1052-1056). They argue that the rise in student numbers since the introduction of desktop publishing in the 1980s together with a more diverse student population has led to different student expectations and changes in the culture of higher education courses. Widening participation has facilitated an increase in recruitment directly from sixth form study and from ethnically diverse background from the UK, Europe and internationally. This places pressure on the existing curriculum which they suggest may lead to a narrowing of content as deficiencies in prior learning or knowledge has to be accounted for. Ultimately, they argue, this will lead to courses becoming predominantly software oriented. Other issues, outlined by Howard A. Doughty (2006, p. 19) for example, are due to quality assurance (QA) procedures based on aims, outcomes and assessment practices that contribute he suggests towards the cyclical and reinforcing nature of current educational initiatives. Many issues are directly influenced by the design industry itself for example, professional skilling or the acquisition of production led software skills which have become a pre-requisite for employment.

Approaches to design education are difficult to discuss due to different perspectives being held within both academic and industry practice regarding the role of creativity in graphic design. This is due in part to different terms and definitions

being used to describe and explain the same practices. For example, in his article for *Design Issues* 'To Make or Create? What should Students of Design be Taught? James T. Wang (2015, pp. 3-15) argues for recognition amongst design academics that there is a difference between making and creating within the process of designing.

The validity of the discipline of graphic design as it is practiced and taught today and whether it remains fit for purpose in twentieth century communications is now increasingly in question. This thesis therefore seeks to understand the issues surrounding creativity, what it is and the role it plays in terms of the discipline of graphic design, why the issue of the perceived inconsistencies in the standards of creativity and critical thinking[3] is significant, and how it might be addressed by design education and the design industry. Whilst some of these issues have been discussed within the literature, more often in terms of other disciplines for example, product or industrial design, they have not been consolidated to date within the context of graphic design.

This chapter describes the context in which this research project was initiated, and which gave rise to the research questions. In addition, it presents the framework for the study and the arguments for the approach taken.

Background

There have been many arguments presented over the last two decades that make a case for the value of both creative design practice and creative design education. These are supported with evidence about the significance of the creative economy with the UK creative industries being identified as one of the potential sources of growth and innovation in the future (Cox Review 2005, p. 10; Design Council 2015, p. 18). The establishment and promotion of art and design schools throughout the twentieth century explain in part the success of the UK as an internationally recognised global centre of excellence for creative work (British Council, 2008-2011). These design schools shaped thinking in relation to creativity and their ideas continue to underpin much of design practice and education today. However, the

[3] Chapters One, Two and Three will discuss the points of overlap between these two terms.

educationalist Angela Partington (2012, p. 73) argues that they now threaten to undermine the UK's reputation for creativity because the principles of design education, developed to underpin twentieth century design practice, are no longer fit for purpose.

Although design schools (many of which are now universities) currently provide high-level individual and craft based creative skills, with significant input from industry-based practitioners and work experience, the prospects for UK design graduates remain disappointing (Partington, 2012, p. 74). Results from the graphic design survey (discussed in Chapter One) confirmed the proposition presented in the foreword that employer's value professional skills (for example, strategic and critical thinking, market awareness, research, communication and presentation, teamwork, project planning and management etc.) as highly as specialist design skills. However, professional skills are often treated as a bolt on or not taught at all within the design curriculum, rather than recognised as essential to being creative. Partington (2012, p.75) suggests therefore that alternative ways of engaging with industry should be considered in order to develop a curriculum which integrates professional skills with technical competence and creative and critical thinking. This will ensure students are able to turn creative ideas into innovative business propositions contributing to the quality and future of cultural life.

The first decades of the twenty first century have seen a rise in the global economy as well as social and cultural change. Design educationalists have been challenged by governments to address issues of economic prosperity, social justice, health and well-being, digital futures, global security, and environmental change. This poses fundamental questions regarding how design education might engage with these issues. The educationalist Anne Boddington (2012, p. 13) argues that design education has done little, other than to respond to government and funding council initiatives, to reflect on whether the education provided in HE includes appropriate content. In order to address these issues Boddington (2012, p.14) suggests it is necessary to question current perceptions in terms of accepted design histories, vocational, intellectual and professional formation and how or why there is a shared understanding of how these are defined within higher education. As argued by Partington (2012, p.73), she also questions whether they are fit for purpose.

Conditions within the UK and globally demand that graduates today invest for the long term in an education that will provide them with a 'value for life'. In the 1999 *NACCCE Report* (National Advisory Committee on Creative and Cultural Education 1999, p. 21) it was proposed that education should provide students with a creative and critical intelligence that would enable them to draw on their knowledge, skills and experience in order to respond intelligently, accommodate change, innovate and adapt as the world changes. The later publication of the *Cox Review of Creativity in Business* (Sir George Cox 2005, p. 1) continued this discussion observing that in terms of exploiting creative skills more fully *"the complex, many-faceted nature of the issues was rooted in long-term perceptions, attitudes and practices"*. It went on to argue that creative specialists must have a greater appreciation of the context in which their creative skills will be applied and have the ability to discuss projects with clients and colleagues in their own language (Cox 2005, p. 28). Boddington (2012, p. 14) asserts that design education is well placed to respond to these challenges however she argues that whilst educationalists recognise the potential there is a lack of understanding regarding how to make the necessary changes. For example, whilst graphic design students are encouraged to engage with social, technological, and business behaviours they do so superficially and uncritically due to a lack of understanding of these other forms of knowledge. An example in graphic design terms would be the psychology involved in influencing consumer behaviour and the ethics involved in doing so. Lorraine Wild (2002, p. 143) and Ellen Lupton and Jennifer Cole Phillips (2015, pp.10-13) confirm this view observing that the nature of knowledge and how it is acquired is rarely discussed in higher education. Instead, focus is given to instilling the knowledge of the specific 'community of practice'. Once these academic communities are established barriers to seeing, learning and understanding other forms of skills and knowledge are created. Boddington (2012, p. 14), NACCCE (1999, p. 82) and Philippa Lyon (2011, p. 103) argue that the challenge for educationalists therefore is how to sustain the value of immersive experiences alongside the knowledge, skills and understanding required to transition between other communities of practice, either within education i.e. between disciplines, or between education and practice, industry and society.

Providing an industry perspective Don Norman (2010), former VP at Apple and Director of The Design Lab, University of California, recognises that many of the

'problems' and 'issues' designers engage with involve complex social and political issues and as a result, designers are required to engage with the behavioural sciences (psychology, anthropology, cognitive science etc.). For example, when designing online user interfaces or understanding how to communicate to global audiences. However, Norman (2010) argues they are currently undereducated for the task. Boddington (2012, p. 15) agrees and argues that the role of higher education therefore is to develop an understanding of how to instil design communities with the scholarly confidence, curiosity, and skills to develop and sustain awareness of other disciplines and other forms of knowledge. Boddington (2012, p. 15) acknowledges this is difficult to achieve due to the design sectors apparent continued unwillingness to contribute to or exchange with alternative communities of practice. To reposition and explore more fully the scholarship of design practice would, she suggests, require a transformation of the educational framework in which learning takes place. Boddington (2012, p. 16) and Norman (2012) argue that a new framework would enable educationalists to develop a scholarly culture of creative and critical enquiry, develop an environment in which to engage physical and practical experience, and develop tools and methods that bring together knowledge and skills. These would draw on both the past and present in order to consider and make new futures possible. The challenge for educators today therefore is to explore what new knowledge might be required and how might learning and teaching initiatives reflect this.

Despite the observation in the Cox Review (2005, p. 32) that the majority of students within the creative arts will not have the opportunity to practice as professionals there is still a view held within design education that graduates will primarily work within the creative and cultural industries in a format that is a linear extension of their current studies. Graphic design students are vocationally trained in discipline specific activities associated with practice for example, project management or technological skilling. Design academics argue that this ensures graduates are work ready on leaving higher education. However, a broader education (as opposed to training[4]) that includes specific discipline related activities would encourage engagement with new forms of knowledge outside the immediate community of

[4] The difference between education and vocational training will be discussed further in Chapter Five.

practice. This would not only lead to greater knowledge and understanding from which to draw when engaging in graphic design activities but also facilitate the ability to move around more readily within the sector adopting alternative roles. For example, Boddington (2012, p. 18) cites recent research in Innovation Studies which reinforces the role of creative facilitation or mediation within practice. This reframes design practice and presents new challenges and opportunities. Emphasis is on collaboration and creative co-production, where process and purpose are considered more important than quality of the creative output. This contrasts with current educational practice where the quality of the creative output is perceived as more important. If the curriculum was reframed the skills developed by students would be transferable ensuring that they were not only work ready but that their career prospects were also future proofed.

In light of these views this thesis will argue that it is imperative that the role of graphic design education in terms of creative and critical production is reappraised. The design curriculum for the twenty first century should not focus primarily on the development of content but on the ways in which knowledge is combined, evaluated, experienced, and applied. This calls into question the relationship between creativity and critical thinking in the formation of graphic design interventions that address the issues experienced today in terms of economics, society, and culture. Understanding this relationship and the role it plays within graphic design will better enable designers to critique and shape today's world and create that of tomorrow.

Research Aims and Objectives

This research contributes to current knowledge and understanding of graphic design practice by addressing the perception that the development of design education has led to an incomplete picture of the role of creativity in graphic design amongst graduates. Through primary and secondary research, the study gains insights into the current understanding of the role of creativity in graphic design across both industry practice and within UK Higher Education. These insights provide direction in terms of addressing the issue of inconsistency in design education. The purpose of the research is to make recommendations regarding changes to curriculum content and

delivery across UK HE design institutions. In order to address this the research project asks a number of questions.

Main Research Question

1) What is the role of creativity in graphic design?

Secondary Research Questions

In addressing the primary research question two associated questions arose within the research and are considered within the thesis. The first considers the role of creativity in terms of its economic, social, and cultural value within contemporary practice. The second considers the role of creativity in terms of curricula content and vocational, intellectual, and professional formation.

2) Why is creativity important to graphic design education and industry practice? (See Chapters 4, 5 and 6)

3) How can creativity be facilitated within graphic design education and industry practice? (See Chapters 5 and 6)

Research Approach

In order to answer the research questions a qualitative online survey was designed and emailed to named design practitioners and design educators. The aims of the survey were to establish if the combined community of practice reflected the same experiences and perspectives presented and speculated on in the forward in terms of the role of creativity in graphic design and if not, what alternatives should be considered. It was also essential to establish a set of parameters for discussing the role of creativity in graphic design within the thesis as definitions and terms of reference differ widely. The outcomes from the survey confirmed that research into the role of creativity and critical thinking in relation to graphic design was essential and that there was some urgency for a study of this kind. They were subsequently used to provide the rationale for the thesis.

The survey was supported with a theoretical, historical, and contextual framing of the research questions via a literature review of the extant scholarship in the field utilising journals, government reports, industry magazines, manifestos, information

published by professional bodies and monographs from industry practitioners. The review provided a new theoretical framework from which to consider the survey questions, address the issues concerned within the thesis, and enable future discussions on the role of creativity in graphic design.

Limitations of the Study

This research has been limited by several factors. The first limitation is the lack of critical writing within the discipline of graphic design. This necessitated reading widely across other disciplines that have experienced similar difficulties in order to understand the implications and potential solutions to the issues identified. The second limitation is that educationalists and industry practitioners are preoccupied with other concerns. Although there are some academics within the discipline that engage with research there is little graphic design research from industry practitioners from which to draw. Thirdly, the primary research involved a small exploratory scoping study to set up the parameters for the research. It was based on the extended peer network of the researcher and therefore only captures a small cross-section of the sector. A larger UK wide study would be required for further, more in-depth enquiry.

In reviewing the literature associated with the discipline it became clear that as outlined in the *Research Excellence Framework 2014: Overview Report by Main Panel D and Sub-panels 27-36* (Higher Education Funding Council for England, 2014 p. 85) the intellectual and theoretical underpinning of graphic design research is weak. Sue Walker (2017, p. 549), writing in *The Design Journal*, agrees and confirms that whilst the last twenty years have seen design research gain momentum the field of visual communication, particularly graphic design, is under researched in terms of scholarship.

Although there are books published on graphic design on a regular basis, they are informative rather than critical with a strong historical dimension that considers people, movements, or place. Monographs, journal papers, exhibitions, textbooks, and readers, all provide resources that have raised the profile of graphic design, its heritage, and defined the field. Some research considers bodies of work, design approaches, social and historical trends, or national styles, for example *Swiss*

Graphic Design (Richard Hollis, 2006). Sometimes research is subsumed into other research studies such as 'cultural history' or 'visual culture', for example *The Culture of Design* (Guy Julier, 2008). Many resources are coffee table books full of pictures with no critical underpinning of the work presented, for example *The Graphic Language of Neville Brody* (Jon Wozencroft, 1988). These publications are valid and contribute to the overall understanding of the discipline but not as scholarly study. There are very few graphic design specific academic journals that researchers might use and the ones available such as *Visual Communications* tend to favour practice-based research, a sub-discipline focus such as typography, or cross-disciplinary studies that might for example, encompass education. There is considerable specialist research in some sub disciplines of graphic design such as typography and typeface design or information design for example, *Information Design: Research and Practice* (Alison Black *et al.*, 2017). However, they invariably consider the specifics of practice such as how to use images and typography. Journals with a broader base such as *Design Issues* and *Design Studies* are more likely to publish research with either a contextual approach to graphic design issues such as co-design, design as value, design culture, design thinking etc. Publications such as *Eye* magazine, *Baseline* and *Design Week* are useful in raising the profile and reach of graphic design however, they are intended for industry not academic audiences and therefore cannot be included in terms of citations within Research Excellence Framework (REF) exercises. The design blogs designers choose to engage with are equally lacking in critique.

Whilst there have been examples of critical writing addressing specific themes within graphic design the discipline today still lacks a critical voice in terms of issues affecting the discipline, particularly that of creativity. The *Looking Closer* series of books published between 1994 and 2006 with contributions by design educationalists and practitioners have compiled the majority of critical writing within the field but the last publication was over a decade ago. More recently *The Graphic Design Reader*, edited by Teal Triggs and Leslie Atzmon (2019), brought critical writing up to date. However, as if to emphasise the limited material available the compilation carries a considerable amount of work previously published either within the *Looking Closer* series, mainstream design journals such as *Design Issues* or industry magazines such as *Émigré* magazine. This is supplemented with only a

small number of new or recent contributions confirming that critical writing within graphic design remains limited. There is a wealth of critical writing on the topic of creativity, particularly within peer reviewed journals in other disciplines. However, as confirmed by Walker (2017, p. 549) in the context of graphic design there remains very little published work in relation to creativity and critical thinking of either contemporary practitioners and their work or current industry practices and initiatives.

It is in the cross-disciplinary area of research that critical writing on graphic design is mainly to be found, for example *Graphesis: Visual Forms of Knowledge Production* (Joanna Drucker, 2014) that considers graphic design theory with a focus on digital media. These dialogues have expanded the scope for research and critical writing in graphic design and brought academic rigour to a discipline that continues to discuss its practice in terms of vocation rather than as an academic subject requiring intellectual scrutiny. Walker (2017, p. 557), argues that when considering graphic design as defined in this broader context there is considerable potential for the development of graphic design research to contribute to new knowledge and understanding about materiality, making, and the relationship to broader social, political, cultural, and economic contexts. This thesis positions graphic design within this broader context in order to develop a platform from which to engage in further critical enquiry and research within the discipline. Due to the limitations discussed this research draws on texts from outside the discipline in order to make observations, draw parallels, and form arguments around the role of creativity within graphic design. In doing so this thesis contributes new knowledge within the field of graphic design.

Research Scope

The research is centred on graphic design practice and education within the UK. The scope of the research therefore considers graphic design as it is understood within Western Europe. Graphic design as it is now practiced only emerged at the end of the nineteenth century therefore the focus for the research is the twentieth century onwards, particularly from the mid 1980s when the discipline moved from analogue to digital production. The thesis is divided into six chapters that provide historical

and theoretical support to the narrative, contextualise the research questions and present the primary research findings. Collectively they consolidate and evaluate the main issues concerned in relation to the research questions and consider the views of key design industry practitioners and educationalists in relation to current and future practice. In doing so this research will provide a new theoretical framework from which to further these discussions in relation to the discipline of graphic design. The lack of critical writing in relation to graphic design practice necessitated reading widely across other disciplines, for example product and industrial design, where practitioners and educationalists experience and write about similar issues. Creativity in particular is widely written about however, not in the context of graphic design.

Creativity as a term means different things to different people and understanding what it means to be creative has changed significantly over time. Equally, it is valued in different ways by a variety of stakeholders across the arts, sciences, humanities, business, commerce, society, and culture. Creativity is therefore reviewed holistically from a number of perspectives and each chapter within the thesis considers these within a given context such as design education or industry practice. This theoretical framework is used to provide a definition of creativity that might be used within the thesis, both theoretically and in practice, in order to discuss creativity within the discipline of graphic design.

James C. Kaufman and Robert J. Sternberg (2010, p. x111) consolidate modern definitions of creativity stating that:

> **Creativity must represent something new, novel or original.**
> **Creative ideas must be of high quality, merit or value.**
> **Creative ideas must be appropriate to the task.**

However, in considering the role of creativity in graphic design it became apparent that a more discipline specific definition was required. In this context therefore:

> **Creativity is considered to involve imagination and a process by which ideas are generated, connected, and transformed in order to interpret, provide meaning and create value.**

Graphic design as it is understood today is a relatively new discipline having evolved to its present form in the early twentieth century. During the nineteenth century practice was referred to as ‘commercial art’ due to its evolution from craft practice

which according to Phillip B. Meggs (1998, p. 320) and Hollis (2001, p. 8) was distinguished from the fine arts by its focus on process and function. Design at this time had not been isolated as a discrete practice. In order to discuss the history of graphic design and contextualise the research question it is therefore necessary to consider the discipline in the context of the wider category of the arts and craft in particular. Consideration is given to how creativity is defined, how and why definitions have changed over time, and the implications of this for graphic design practice. How creativity is perceived, and its role evaluated within society, is also considered.

Due to its craft-based heritage graphic design practice throughout the twentieth century reflected the perceptions and models of creativity handed down through the community of practice. Harold G. Nelson and Erik Stolterman (2012, p. 2) argue that many of the difficulties experienced in discussing the role of creativity within design today can be directly attributed to the continued description of design as craft. The understanding of the role of creativity within both the design community, design education and society is shaped by these perceptions. However, the transition within design practice from analogue to digital during the mid 1980s in terms of the process of design necessitates a re-evaluation of what it means to engage in graphic design and creativity. This re-evaluation has major implications for the way creativity and its role is considered within the design process. In order to address this the thesis considers the development of graphic design as a discipline throughout the twentieth century up until present day.

Design education has been significant in shaping design practice and identifying the skills necessary to enable students to become successful practitioners. However, both the curricula and methods of teaching reflect historical understanding regarding the nature of practice and the role of creativity within graphic design. For example, the educationalists John Dewey (2007 [1916], pp. 54-62), Michael Bierut (1994, p. 215), Gunnar Swanson (1994, pp. 69-70) and Max Bruinsma (2005 [1997], p. 180) argue that design education in the main has been geared towards specialism rather than generalisation and vocational training has underpinned the teaching models utilised. Together with the impact of digital technology this understanding is creating tensions within the discipline regarding the future practice of graphic design. The

thesis therefore considers how practice has been approached within the educational environment and discusses the key learning and teaching models and initiatives that have shaped academic thought and practice. In doing so the thesis identifies that there is a widening gap between educational imperatives and those of industry that calls into question whether or not design education remains fit for purpose within twenty first century graphic design communications.

Graphic design as a discipline is increasingly difficult to pin down because it is always evolving/developing, in line with digital communications. Whilst graphic designers have always required a technical skills-based understanding of their discipline Adrian Shaughnessy (2010, p. 104) asserts that today's digital technology necessitates that designers broaden their sphere of knowledge. For example, the digital interface designer of today is required to work with computer code, hardware specifications and usability theory. These new skills require the designer to collaborate with others changing the nature of individual practice. How creativity is facilitated in industry is therefore integral to how graphic design is practiced with implications for both practice and education. The speed at which digital communications is changing the environment in which we live also has far reaching consequences in terms of the day-to-day practice of design. What graphic design might be in the future is therefore considered in order to isolate creativity as an activity within design practice recognising that neither creativity nor graphic design is practiced independently of others within the process of design. Business, commerce, society, and culture are also influenced by digital communications and the role and relevance of the designer within this environment is increasingly under scrutiny. This has significant implications for graphic design practitioners emphasising the importance of understanding the role, significance, and value of creativity in graphic design practice.

Chapter 1 – Primary Research Methodology

Introduction

This chapter discusses the primary research strategy, method, data collection, analysis and evaluation, designed to gain insights into the current understanding of the role of creativity in graphic design across both UK Higher Education and Industry practice. The format for the research was a qualitative online survey. It was essential to recognise what information was required in order to design the survey. As recommended by Kimberly A. Neuendorf (2019, p. 211) reflecting on the research questions helped to shape the nature of the questions being asked. Using the research questions as a starting point the aims of the survey were:

- to gather and scope out the views and opinions of participants from within the community of practice (education and design industry) in order to identify whether or not there is consensus amongst participants regarding what is meant by creativity in graphic design.

- to ask the same questions of people from different backgrounds within the community of practice for example, creative directors, designers, academics, technicians etc. The sample would ensure the right group of people were approached.

- to use the findings as a basis from which to negotiate an understanding of creativity and how it plays out in different areas of practice.

Research Strategy

The strategy for the research was to produce a small-scale qualitative survey that would enable views, opinions, knowledge, and experiences to be gathered in order to test the theoretical framework. A qualitative rather than quantitative approach was taken as the survey was small-scale and intended to establish personal views and opinions from within the combined community of practice. The survey ran from 1st - 31st of June 2020. Due consideration was given to the type and feasibility of the research to be conducted. For example, would it be possible to gain access to the relevant people in order to address the questions posed and to complete the research within the allotted timeframe. Consideration was also given to the ethical

implications of the research, for example will the strategy allow for ethical dealings with participants.

The issues discussed within the thesis have been personally experienced and through the process of reflexivity have shaped much of the thinking within the thesis. This position as an insider researcher has been beneficial to understanding the views and sensibilities of the discipline of graphic design, understanding the language and terminology used, and the tacit knowledge shared within the community of practice. As an educator, the researcher recognises the value of being reflexive in relation to the issues being discussed and the researcher's relationship with the data being evaluated. As such the connection of the insider researcher with the discipline, in terms of this particular form of immersed qualitative research, should be regarded as a strength. The term 'insider researcher' is used to describe a situation where the researcher is part of the topic being investigated (Mark Sherry 2012, p. 433; Jenny Fleming 2018, pp. 311-320).

Research Method

As the research was small-scale the method chosen for the study was a qualitative web-based survey in the form of a targeted emailed questionnaire 'hosted' on the internet via SurveyMonkey (See Appendix 4). For ease of access the questionnaire was embedded in the email via a web address in the form of a hyperlink. The questionnaire consisted of a written list of open[5] and closed questions. The closed questions were intended to make analysis of data sets easier by enabling comparison between different groups of people. The open questions were intended to elicit views on different themes amongst participants. The intention was to provide a snapshot of how things are currently rather than tracing events over a longer period of time and to bring understandings gained from the literature review up to date. The benefit of this type of survey is that it enables all participants to respond to the same set of questions. This allows for consistency and precision in terms of the wording of the questions, an important factor as defining terminology in order to ensure

[5] Open questions are those that invite the participant to decide the wording and length of the answer and the issues to be raised in the answer. SOURCE: Denscombe, M. (2014) *The Good Research Guide*. Open University Press, p. 176.

understanding was significant within the study. A qualitative survey would provide more in-depth data and confirm reasons behind views presented. Martyn Denscombe (2014, p.14), argues that due to the internet being part of everyday life there is little evidence that participants supply different types or amounts of information in terms of this data collection method. Also, that the quality of data collected through internet surveys is not significantly different to those of other data collection methods. Other forms of data collection such as face-to-face interviews or a focus group were considered. However, they would require more time of the participants and as both academic and industry practitioners are time precious organising these on a larger national scale would have been prohibitive within the research timeframe available. Timing and ease of completion were important factors in the survey design. Due to the qualitative nature of the questions free text boxes were provided for responses. As qualitative answers take longer to complete the survey was limited to 14 questions.

It took approximately 30 minutes to complete and participants were informed of their progress throughout the questionnaire through the use of a 'progress bar' which confirmed how far they had progressed and how far they had to go to complete the questionnaire. The survey was emailed to 115 named contacts. The objective was to gain insights from a cross-section of individuals across the sector but more importantly to focus on those individuals most likely to have special knowledge about the research topic. The research sample reflected this. The number of respondents was 32 with most survey responses completed in full. Of the 32 respondents 11 were full time academics, 10 were discrete industry practitioners who were not engaged in teaching, 9 were academic/practitioners and 2 were technicians within the discipline. As advocated by Denscombe (2014, p. 165) and in order to ensure the data was reliable, valid, and therefore trustworthy, the survey was initially piloted on a qualified sample of known participants prior to release to ensure ease of understanding and completion.

The Sample

The survey sample was purposive and exploratory rather than representative. Denscombe (2014, p. 33) recommends exploratory samples be used in small-scale

research as a route to enable the discovery of new ideas and theories when relatively unexplored topics are under consideration. The sample included academics teaching graphic design within 9 universities across the UK Higher Education sector. It included all levels of teaching through to roles associated with the discipline such as technical staff and readers within the subject. A sample of industry practitioners were also included from across the UK and at all levels e.g., creative director through to graduate/junior designer. These were either discrete practitioners or academics who maintained their industry practice. Different skill sets would be apparent across the groups for example, the software expertise of technicians who represent applied design as opposed to academics engaged in the theory underpinning design. The different skill sets within the group affect how creativity and its role in graphic design is considered. In particular, designers were chosen due to their experience of either analogue practice, digital practice, or both. As the sample was taken from the researchers extended peer network it was not necessary to screen participants for suitability to take part in the survey. Participants were pre-notified of the survey in advance in order to boost response rates.

Ethical Considerations

Rather than face-to-face interviews or telephone enquiry, the online format was chosen on the basis that participants were known to the researcher. Denscombe (2014, p. 10) argues that this would enable participants to remain anonymous and prevent any bias that may occur through participants providing answers which were felt to be the 'expected' or 'correct' ones. To ensure that anonymity within completed surveys was not compromised due to free text boxes and in order to maintain GDPR (Guide to the General Data Protection Regulation, 2018) any information requested was codified within the thesis with any identifying information redacted. A written statement of intent was provided within an email before the questionnaire was sent out explaining the purpose of the study, its background, the format of the survey, reassurance about confidentiality and how long it would take to complete (See Appendix 3). It confirmed that the research was being conducted in accordance with the conventional code of ethics for researchers. It also explained why the participant had been chosen and the participant's and researcher's rights and responsibilities. Contact details were provided within the

covering email and the participant was informed of their right to disengage with the survey at any point. Informed consent by the participants was given through the voluntary completion and submission of the questionnaire. A curtesy thank-you email was sent out automatically on completion of the survey. A copy of the Ethics Declaration made as part of this study and its approval can be found in Appendix 1 and 2.

Survey Design

The survey was designed in accordance with best practice recommendations provided by Denscombe (2014) in *The Good Research Guide for small-scale social research projects*.

Initially through Question 2 the survey requested the participants provide their own definition of creativity as a means of gauging what definitions were currently being used. It was anticipated that the answers and examples provided would give an indication of whether or not the participants understood the role of creativity within the discipline of graphic design as being different to creativity in other contexts.

Before presenting Question 3 the survey provided a statement confirming that as there is no simple definition of creativity that encompasses all its dimensions creativity is difficult to attribute without a parameter. A working definition was therefore provided to set the parameters for further discussion and participants were asked to use this definition when considering the rest of the survey.

Organising the Data

The questionnaire transcripts were read several times initially in order to gain familiarisation with the data. This preceded any attempts to identify themes within the data and provided a broader understanding of the thoughts and ideas that were emerging. The transcripts were numbered 1 – 32 to aid archiving and in order to anonymise the participants. During the read through some general insights were gained and patterns of ideas emerged across the data. These were identified by highlighting passages from the responses that related to the research question. The general insights and patterns of ideas were noted in order to aid the development of

formal themes to be used later in the analysis. Due to the large number of emergent categories within the data a spreadsheet was designed to locate and organise the data by question number and by category. The passages of text (data) recorded were kept large enough to ensure the context of a given comment was retained. The Participant number was also recorded to enable ease of reference back to the original transcript if necessary. The reading of the data was 'interpretive' (Jennifer Mason 2002, pp. 148-150) in nature with a focus on interpreting the participants understanding of the issues being discussed in terms of the research questions. The reading was also reflexive in nature locating the researcher's own perspectives in the generation and interpretation of the data collected.

Once the patterns of data were identified the process of coding was implemented. Pre-figured and emergent categories were applied to the data on a question-by-question basis and recorded within the spreadsheet. The coding was produced manually written alongside the passage of text that reflected a particular category. For example, question two was coded into a number of categories such as: creativity as problem solving, creating or making, critical thinking etc. Coding the data served two purposes, it enabled categories to be assigned to the data and it provided examples within the data that might be used for the write up of the data analysis.

Generating Categories and Themes

As the patterns of ideas emerged within the data, categories for further analysis were developed. For example, during the reading a common understanding across a number of participants emerged in relation to the significance of the use of specific tools as aids in the development of creativity across both analogue and digital design. The pre-selected categories were used to form the basis for the patterning of the data. Initially the overall number of categories was large but further readings of the data enabled the categories to be refined into fewer higher-level categories or themes aligned to the research questions providing an overall structure to the data. For example, participants discussed similar ideas in relation to more than one question within the questionnaire and recurrent categories emerged. The categories provided a basis for structuring the write-up of the data. Following best practice guidelines for analysing qualitative research four key themes, each containing a

number of related categories, were identified as a manageable number for the thesis. The four main high-level themes identified were creativity in graphic design, the role of creativity in graphic design, creativity in educational practice and creativity in industry practice.

Data Analysis

The data was evaluated using reflexive thematic analysis (Catherine Marshall, Gretchen B. Rossman 1999, p. 150) that provided structure to the data collected. Analysis and interpretation relied on the researcher's capacity as an 'insider researcher' in order to discern the significant themes in the data making it reflexive in approach. Analysis included a search for general statements about relationships amongst categories of data provided by the participants. The process was based on pre-defined categories and on categories that became evident as the analysis proceeded. For example, it was anticipated that participants would discuss categories such as creativity as problem solving. These categories would become 'pre-figured' or 'objective' (Marshall, Rossman 1999, p. 154) themes that would be sought and used to analyse the data once it had been collected. In addition to predefined categories the analysis also sought to identify alternative themes that were common amongst the participants. Analysis found emerging themes that related specifically to either academic or industry-based practice. As an approach these 'emergent' or 'intuitive' (Marshall, Rossman 1999, p. 154) categories or themes are more aligned to the 'grounded theory' (Barney Glaser, Anselm L. Strauss 1967) approach to data analysis than to thematic content analysis. Grounded theory dictates that theory should be 'grounded' in the data gathered rather than imposed by the researcher from an existing theoretical framework. Whilst the weight of interpretation provided by the researcher using thematic analysis may be criticised, and the grounded theory approach considered to be more objective, qualitative analysis is inevitably a work of interpretation.

Research Findings

Once the data had been coded and categories and themes developed an evaluation of the responses was conducted. The following section discusses the responses provided by the participants. Each theme is addressed in turn and structured by the

categories identified within the data. Due to rounding up, the actual numbers involved is included next to the percentages given throughout this section for clarity.

What is Creativity in Graphic Design?

Creativity involves thinking as well as making. Whilst the observations made by participants regarding creativity are not unique to graphic design, to date they have not been adequately explored, consolidated or articulated in this context. This theme encapsulates the participants views regarding what constitutes creativity in graphic design, specifically the relationship between creativity and critical thinking and the differences between creating and making. The process of framing, filtering, and refining the definitions of creativity being articulated enabled a definition of creativity in graphic design to be confirmed. Establishing a definition of creativity in this context is important in order to discuss its role. This is therefore a key theme in addressing the main research question and will be explored further from a theoretical perspective in Chapters Two and Three.

Initially the survey required participants to provide their own definition of creativity in order to establish if there was consensus. They were then asked to confirm how creativity might be defined in terms of graphic design. This was to establish if their views regarding creativity were different in the context of graphic design. There were differences in response across the range of participants reflecting different perspectives and emphasis within practice. The majority of participants considered creativity important to graphic design practice however, there were a few exceptions. For example, 2 Academics and 1 Industry Practitioner confirmed that creativity is not always necessary. This may reflect the nature of their practice experience because not all graphic design projects have the potential for high level creativity. For example, Participant 1 an Academic Practitioner, stated that *"much of graphic design does not require imagination only a degree of special awareness/logic".* By implication 'special awareness/logic' or critical thinking is considered important in terms of problem solving but not necessarily creativity itself. Participant 30, a Technician, concurred and stated categorically that creativity wasn't important in general suggesting other qualities were more important *"I don't think creativity is as important as a good eye for accuracy and attention to detail…the most important*

thing is providing the client with what they want, if it looks good at the end of the design process this is a plus". This perspective assumes that the client knows what they want and does not challenge it and may reflect a common view within design practice that it is not the role of the designer to question the client only the brief. Only 2 survey participants made a distinction between creating and making. Participant 6, an Industry Practitioner, stated that *"True creativity requires discipline not just random acts of making"* suggesting other qualities were required when creating. However, Participant 20, an Academic/Practitioner, either confused the two or did not recognise the distinction suggesting that *"creativity is the ability to make something that wasn't there previously".*

The Academics tended to describe creativity theoretically and in terms of pedagogy. The majority (6) referred to creativity as the connection of unrelated ideas leading to new ideas and directions and their application to problem solving. 1 Academic described creativity only in terms of problem solving. 1 Academic discussed creativity purely in terms of the making of objects. 2 Academics commented that it is difficult to be completely original therefore creativity is often about taking an idea from one area and utilising it in another way or place. 1 Academic described creativity in terms of originality and the use of the imagination to create something new. For the majority of academics' definitions of creativity tended to centre around generating and connecting ideas in response to general problem solving. When discussing creativity in terms of graphic design specifically participants invariably described creativity in terms of its relationship to critical thinking. For example, Participant 27 argued that *"whilst graphic designer's might be tasked with merely styling…considering new ideas and imagination creates more successful outcomes".* Participant 3 goes on to observe that *"graphic design relies on innovative thinking and constant evaluating and re-evaluating".* However, critical thinking in design education in the main appears to equate to either research in support of a client brief, or reflective practice by the student, rather than being considered in support of commercial creativity.

The Industry Practitioners described creativity in practical terms making the connection between creativity and its application to a required outcome. 1 Industry Practitioner described creativity as the assimilation of ideas, knowledge, and

experience in order to address a challenge or requirement in an original way. 1 Industry Practitioner confirmed creativity as the decoration of artefacts rather than addressing a utilitarian need. 1 Industry Practitioner discussed creativity vaguely as visual communication. 1 Industry Practitioner described creativity in terms of being open to alternative thoughts and ideas. 1 Industry Practitioner suggested creativity is about lateral thinking. 1 Industry Practitioner stated that creativity is defined by its output and direction. 1 Industry Practitioner described creativity as the generation and implementation of ideas. 1 Industry Practitioner defined creativity in terms of the designer's ability to engage an audience through emotional connection. 1 Industry Practitioner described creativity as the process of producing original ideas through the use of the imagination in order to create something useful that has value. Definitions from practitioners varied throughout the sample with no one definition being prevalent. In discussing creativity in terms of graphic design specifically participants were much more able to describe the importance of creativity than the Academics had been. For example, Participant 14 described creativity as *"the most important tool to generate ideas to a brief and to create value to the product/solution"*. Whilst Participant 17 argued *"how can one solve a design problem without creative thought and imagination and the ability to see things from all angles"*. Participant 31 argued that *"without creativity graphic design is simply a task; a functional collection of colour, imagery and text. Creativity is key to making all the tools come together and resonate with an audience. Creativity is the difference between 'that looks nice' and 'that's for me'"* This view indicates that creativity plays a significant role in design as persuasion and that there is more going on than simply visual aesthetics.

3 of the Industry Practitioners discussed creativity in terms of process specifically and 1 cautioned against the common templating of creativity within Industry. For example, Participant 17 stated that *"graphic design is not an automated practice however sometimes certain design templates are rolled out parrot fashion"*. Participant 23 agreed observing that *"graphic design relies on the re-application of existing ideas and inspirations (trends and conventions in visual communications). In the last 50 years graphic design has been explored so thoroughly that many visual communication principles have seen exposure somewhere and for some reason"*. Both observe that common to practice is the tendency to re-hash existing material

rather than generating something new and original. By contrast, Participant 6 was either more in touch with the need for creativity or more in a position to act upon it arguing that *"process is vital but reducing graphic design to process alone denies the need to engage with the audience at a human level, to excite them, connect with their desires, aspirations, interests and needs"*. This may reflect the differences within design practice between what is considered the 'jobbing design' often associated with freelance work and the higher-level creative design associated with larger design agencies. Freelance work is often low paid with little requirement to build client relationships therefore projects are often quick turnaround with little time and therefore investment in serious creative and critical thinking. In contrast, large design agencies spend a great deal of time investing in developing the client relationship as a means of engaging with creativity through the time afforded to them by clients that recognise the role and value of creativity in commercial terms.

The Academic/Practitioners described creativity both theoretically and in terms of its application to a specific outcome as might have been expected. No single view was prevalent throughout. 1 Academic/Practitioner identified creativity as the generation of original ideas that did not conform to the ordinary or the habitual. 1 Academic/Practitioner evaded the issue by stating creativity is a broad church. 2 Academic/Practitioners did not offer any definition of creativity. 1 Academic/Practitioner described creativity as generating relevant ideas within specific parameters. 1 Academic/Practitioner defined creativity in terms of the unexpected. 1 Academic/Practitioner discussed creativity as visual communication in response to a brief. In discussing creativity in terms of graphic design specifically participants either described creativity as something which improved the solution or outcome or ensured the solution or outcome did not become formulaic. For example, Participant 9 explained that *"practice relies on creativity. Poor examples of graphic design are often formulaic, cliched and generally uncreative in response to problem solving"* whilst Participant 13 argued that designers should aspire to be creative and when they do not *"it is inevitable that their work will become predictable and imitative"*. Both recognised the role of creativity in terms of supporting the problem solving associated with practice and that designers should aspire to be creative and critical in their design responses in order to produce good work that has value.

The Technicians had two distinct perceptions of creativity. 1 Technician described creativity in terms of utility as the presentation of information in a way that is attractive, informative, easily understood and interesting. 1 Technician defined creativity as producing something new or original through the use of imagination in order to apply it to some form of output. Both identify with the view that creativity has a purpose in terms of a final output or application however this was described in terms of form making rather than creating.

7 of the Academics discussed the relationship between creativity and critical thinking however this was generally in relation to problem solving or as an alternative approach to creativity rather than being considered intrinsic. It was discussed as a separate activity. For example, Participant 28 argued that *"too much emphasis is placed on creativity rather than decision making, graphic design can also be realised through a more pragmatic approach of consideration and refinement where the designer needs to be less creative and more strategised"*. The depth of critical enquiry discussed ranged from being willing to request further information in support of creative work through to the ability to synthesise information provided. 1 Academic referred to the benefit of contextual studies in support of practice. This suggests that like the term creativity, the term critical thinking is also used in a variety of contexts with no clear definition prevailing. However, Participant 4 described the relationship in terms of making meaning *"the making, construction, synthesising of some graspable entity. To make something meaningful from an individual, social or xeno-designer scale"*. This suggests that some academics do consider the relationship between creativity and critical thinking in terms of its role and value in graphic design and that the two are not considered as separate or distinct activities.

Only 3 of the Industry Practitioners described the relationship between creativity and critical thinking suggesting that whilst the concept is universally discussed it is invariably used to describe basic decision making, the translation of a complex text narrative into visual narrative as in Infographics or the interpretation of facts and general problem solving. For example, Participant 7 described creativity in terms of *"simplifying complex ideas through the use of imagination…transforming a set of dry statistics into easy to read visual graphic*s". Equally, Participant 6 discussed the

significance of critical thinking as problem solving *"people refer to the creative spark like a eureka moment. It may happen sometimes but more usually it is a way of thinking that pervades the whole process…delivering a steady stream of successful design solutions"*. However, Participant 23 argued that *"the categories and markets we operate in are high consumption, long established applications of graphic design. This has created a very sophisticated and varied consumer audience of graphic design and thus results in significant challenge when trying to innovate"*. This participant clearly recognises that when graphic design conventions are established creativity and critical thinking become even more important.

Of all the participants in the survey it was the Academic/Practitioners who were most able to articulate the significance of the relationship between creativity and critical thinking in the context of graphic design. However, only half of those in the survey conveyed this. 2 Academic/Practitioners described critical thinking in terms of strategic thinking. 2 Academic/Practitioners referred to creativity as an intellectual pursuit that utilises critical thinking in order to imaginatively ideate and solve problems objectively. For example, Participant 8 described graphic design as *"an activity that is confined and restricted by a precise brief. Within such constraints creative thinking is essential. It is the element that lifts the solution above mere technical accomplishment".* Equally, Participant 21 described creativity and critical thinking as *"a broad visual and culturally informed creative cognitive ability and the skills to focus research to inform and develop the resultant original concept… to produce an effective design outcome".* Significantly, both participants discuss creativity and critical thinking as a combined activity that leads to creative thinking. They also emphasised the role of creative thinking in terms of adding value to design projects.

The Technicians did not describe critical thinking as part of their practice however, this may reflect expectations of them in terms of their role rather than in terms of their understanding.

Participants were asked to describe the creative aspects of their own practice as a means of establishing what they considered constituted creative activities or creative process. 7 of the Academics discussed critical thinking when describing creative process although they did not specifically name it as such. For example, Participant 5

confirmed *"I read all manner of things. I observe the world carefully. I write as a way of processing thoughts. I always aim to communicate well and clearly"*. Participant 15 went further and made the connection between creative and critical thinking although not explicitly stating *"I engage in concept design and realisation. A way of seeing and trying out ideas"*. This description emphasises the iterative nature of the relationship between creativity and critical thinking. Participant 22 agreed and observed the significance of research as part of creative practice stating *"I use research and experimentation to create design solutions"*. In terms of building knowledge in support of creativity and critical thinking Participant 29 provided examples of how being open to new experiences informs this process by confirming ongoing engagement with *"research – searching through pertinent visual inspiration, keeping a journal of inspiring examples, …engaging with visual culture and keeping records, travel and experience of different cultures".* 4 of the Academics discussed creative activities in terms of outputs or products and provided a list of items produced. For example, Participant 10 listed *"logo's, branding, corporate identity, presentations, signage and posters"*. It is interesting that creativity was identified and discussed in terms of outputs not activities.

When asked to describe what creative activities they engaged in 9 of the Industry Practitioners also listed products or outputs. For example, Participant 25 listed *"brand design, corporate identity, logo design"*. However, Participant 31 discussed creative activities in terms of process. For example, *"strategic planning, brand positioning, establishing tone of voice and style. All of these form part of a creative process that precedes any pencil-to-paper activities"*.

The Academic/Practitioners were the only participants to discuss creativity in terms of process. 2 Academic/Practitioners described the creative process in terms of experimental techniques or practice and the courage to take risks. 1 Academic/Practitioner observed that some environments are more conducive to producing creative responses. When asked to consider creative activities specifically they also listed outputs or products and included listing teaching activities as an output. However, 2 Academic/Practitioners discussed creative activities in terms of critical thinking and activities not immediately related to creating or form making. For example, Participant 9 described creative activities in terms of *"creatively*

investigating a brief to find the heart of the problem and to approach it from different perspectives. This is an intellectual and playful engagement with the problem, responding rapidly with visual possibilities usually during the client meeting. As a design solution progresses creative development involves looking for opportunities and experimenting with physical and conceptual elements. Most of the creative work is done in these early stages of the design process…iterative development and execution is more systematic than creative". This statement is significant because it makes a distinction between the intellectual activity of creating as opposed to the systematic process of making.

In terms of creativity in graphic design practice the Technicians described it in relation to either its visual contribution or in terms of conveying information effectively. For example, Participant 30 stated that *"graphic design is organising information creatively to communicate messages effectively".* When asked to describe the creative activities they engage with Participant 12 described creativity as process albeit through the facilitation of student work stating *"I assist students to produce their best work in terms either analogue or digital formats – animated, video, mixed media"*.

Commenting on the prevalence of creativity in terms of practice the Academics suggested that creativity is not always required. For example, Participant 28 stated *"I try not to be too creative with graphic design pieces because most are required to be functional rather than flamboyant".* This suggests that creativity is understood only in visual terms rather than a broader definition that might encompass critical thinking in order to ensure the functionality worked well in terms of the user. Others, for example Participant 29, stated quite clearly that *"an imaginative response is not always required".*

Discussing the prevalence of creativity in practice the Industry Practitioners were pragmatic and argued that whilst they considered it their intention with all projects the reality was that not all projects offered the scope to be creative. For example, Participant 24 explained *"often it's more the case that people's ideas and values need to be heard and turned into visual elements. I have seen more functional design become popular and therefore see graphic design as something that has reason and purpose".*

Commenting on the prevalence of creativity in practice Participant 30, a Technician, stated that *"I have to follow strict brand guidelines…from colour and illustrations to copy and font etc…this stumps my creativity".* This may reflect the two-tier system that operates in industry practice where creativity is required from the 'creatives' such as senior designers and creative directors but not from artworkers or technical staff who are engaged in either the 'jobbing' design briefs or the production of technical artwork for print. This distinction will be discussed in more detail in Chapter Six, pp. 228 - 230.

9 of the Academics confirmed that designers engage with creativity in a different way in a digital rather than analogue environment. However, they argued that analogue and digital are interchangeable and whilst they are two distinct modes of working, they are not mutually exclusive. However, whilst the older academics generally preferred to ideate in an analogue environment, they observed that younger students tend to work directly with computer programmes and this preference would appear to correlate with the perceived demise of analogue in favour of digital working in Industry. However, they did suggest that students' reliance on software programmes seriously impacted on their creative abilities. For example, Participant 17 explained that *"Designers react differently when using physical materials than when they are moving a mouse and staring at a screen, there are likely to be more accidental discoveries using the physical".* By contrast Participant 19 argued that *"Different processes can lead to different ways of thinking and seeing. Some analogue processes can create the environment for a new idea that a digital process cannot and vice versa".* However, some commented that there were particular issues in a digital environment due to either the limited skill of the user or an over-reliance on the technical possibilities of the software. For example, Participant 15 observed that *"The tools can aid or hamper the [creative] process. E.g. an unskilled user of software will be limited in their creativity by their skill"*. Participant 27 argued that *"in a digital environment it is easy to get locked into technical possibilities rather than consider possibilities/ideas with an open mind. However, when stuck, software can provide fast ways to try out something different"*. 2 Academics disagreed that analogue and digital environments encouraged different forms of engagement. For example, Participant 22 argued that whilst they did not approach creativity differently in a digital environment *"different practices stimulate different*

experiences". Participant 29 confirmed that *"I design on paper initially working through alternatives. My students are tempted to go straight to a computer and their solutions are often restricted by their knowledge of a specific programme which in turn limits their design outcome".*

8 Industry Practitioners confirmed that they engage differently in a digital rather than analogue environment. Suggestions as to why centred around views regarding how the brain works differently in the two environments, how the environments themselves influence the outcomes of creativity, or simply that the tools are different, but creativity is necessary in both environments. For example, Participant 2 observed that *"I believe the brain works differently when using digital media as opposed to physical media".* Participant 3 went on to argue that *"working in either analogue or digital shapes the outcome of a designer's creativity"*. Industry Practitioners were more open to ideating directly within a digital environment than the Academics had been however they did confirm that it is common practice to work conceptually on paper before transferring to the computer. For example, Participant 20 stated that *"I advocate starting with hand drawn concepts. This practice is common but not exclusive to digital designers. The Mac is also a tool and [some] highly skilled designers are able to create directly within their chosen programmes"*. This confirms the point made by the Academics that in order to create successfully on the computer the designer needs to be fully articulate with the software programmes being used otherwise their creativity is stilted by their lack of software skills. One of the strongest arguments provided for the benefit of working digitally is that of time. The digital environment enables lots of alternative concepts to be generated quickly. In Industry where time is money this is a significant benefit. For example, Participant 21 argued initially that *"producing analogue roughs of concepts is time consuming and would have constrained the number of ideas produced. Digital is quicker enabling more choice however these are not necessarily better results"* and then went on to suggest that *"however, having to think more slowly in analogue before committing to paper was a useful discipline".* That analogue is slower and therefore allows time for better quality thinking was the main reason given for the benefit of creating in an analogue rather than digital environment.

7 of the Academic/Practitioners agreed that designers engage with creativity differently in a digital rather than analogue environment. They argued that initial concepts tended be developed on paper before committing designs to the computer and that working in this way allowed the necessary thinking time for creative engagement and critical thinking. Participant 8 suggested that *"digital processes present potential distractions from true creative thinking. Visually impressive effects using a library of digital features can be applied instantly masking indolent thinking. Analogue production through greater realisation time allows time for contemplation and more inventive ideas in response to the brief. However, digital production obviates tedious manual labour realisation allowing more scope for the application of different approaches and modifications".* Participant 13 went on to argue that *"Educationally it has become problematic in that courses are constantly chasing the tail of digital software development. Some of the more fundamental building blocks such as thinking creatively and developing visual thinking through practice and historical referencing is neglected".* However, they agreed with the Industry Practitioners that once on the computer refining design work, for example changing colours or fonts, was easier and quicker and therefore more cost effective for the client. For example, Participant 7 explained that *"Pre-digital a rough version would be produced and approved by the client before committing to the computer…the digital process allows for rapid and broad changes to layout and colours etc".* In contrast Participant 6 argued that *"as a designer your goal is to create the best outcome for the desired format and audience regardless of it being analogue or digital".* Participant 9 agreed stating that *"it is entirely determined by the nature of the project and client. I approach both in the same way".*

The Technicians agreed that designers engage with creativity in a different way in a digital rather than analogue environment. Participant 30 argued that *"there is less of a connection to the work created digitally, and you could argue that there is less creativity involved…the digital environment gives the opportunity to create quicker variations of a design than in an analogue environment".*

The Role of Creativity in Graphic Design

This theme captures participants views regarding the role of creativity in graphic design and addresses the main research question directly. The main difference between creativity and creativity in the context of graphic design is the creative thinking involved rather than the form making associated with the discipline. It is this difference which defines its role. Very few of the participants addressed this theme explicitly but answered it indirectly through the survey questions. This is probably because they have not thought about it before and therefore it is not in their immediate consciousness. However, this has implications both for the future of the discipline and practice. The theme also explores whether or not there is common understanding and dialogue between educationalists and industry regarding creativity and its role in graphic design practice. The theme will be explored from a historical perspective in Chapter Three.

The Academics generally discussed the role of creativity in graphic design holistically in terms of either furthering human potential or shaping the future of society and the environment. 1 Academic discussed the role of creativity in terms of supporting ecological awareness. Several participants discussed the role that creativity plays in terms of personal development. For example, Participant 3 stated that *"Bringing creativity into the mix always keeps me stimulated and looking for new solutions".* Whilst Participant 4 suggested that without creativity *"I would not be able to grasp what it is I am doing in terms of understanding the world around me, my students work, design practice, historical context and speculative future facing issues".* Participant 5 argued that *"without creativity we wouldn't have new ideas, practices etc. Creativity challenges the discipline and forges new boundaries".* Only Participant 10 discussed the value of creativity specifically stating that *"creative work communicates meaning and influences people".* In contrast Participant 27 commented that *"without creativity you only come up with templated work which might result in less successful solutions…it's also less fun to do."* This participant reflected the view that much of graphic design is visually stylised and templated.

The Industry Practitioners also discussed the role of creativity as adding value in terms of the human experience. They also discussed it in terms of a unique selling

point (USP) when competing for business. For example, Participant 6 explained that *"from a personal perspective the fulfilment that the creative aspect of a project brings is very important to my motivation"*. By contrast Participant 7 argued that *"creativity sets my work apart from others, hopefully winning tenders"* and Participant 14 stated that *"as a senior graphic designer, creativity is crucial in answering client briefs in order to create a unique solution that looks like no other design".* This comment again highlights that there is a creative hierarchy in design agencies where creativity is a requirement of more senior designers.

Only 1 of the Academic/Practitioners discussed the role of creativity in graphic design. This was in terms of adding value to a specific project.

There was a lack of clarity amongst the Academics regarding whether or not there was a common understanding between education and industry regarding what constitutes creativity in graphic design. The prevalent view (8 Academics) was that whilst there was a common understanding in the main Industry dictates the role of creativity in commercial practice. This was not considered a good thing. For example, Participant 1 argued that *"the danger is that creativity is typecast or controlled by industry"*. However, Participant 4 argued that the main issue is in terms of how creativity is evaluated stating *"they have different modes of evaluation. Education is more meritocratic taking into account the student as an individual. In Industry it is the design itself – the outcome – that is under review not the individual".* This suggests that creativity in graphic design plays different roles at different times in the development of the design practitioner. In education the role of creativity relates to process and the development of a student's abilities both intellectually and in terms of building appropriate skills however, in industry the role becomes associated with the product or outcomes and is commercially focussed.

The majority of Industry Practitioners (8) were unable to articulate whether or not there was a common understanding between education and industry regarding what constitutes creativity in graphic design. However, Participant 7 cautioned that *"industry thinks it knows what it wants – trained designers – but what it wants is creativity born of education".* Participant 14 was more positive stating *"the theoretical study of creativity in education and industry do generally marry up as the former builds a good foundation of knowledge a young designer requires in order to*

practice. The most notable difference is the timescale this creativity is achieved in". Participant 24 argued that there is no longer a common understanding as the definition of graphic design in industry terms has changed radically over time stating *"there has been a massive evolution and diversity in knowledge associated with graphic design, especially with regard to technology. There is no common understanding because graphic design is now such a broad term".* Participant 31 agreed there is no longer a common understanding however the suggestion here is that both education and industry has lost sight of what creativity is and what role it plays in practice *"I fear parts of the industry don't understand what constitutes creativity. As more and more poorly educated designers appear offering design services, I see a lack of integrity across the industry. There is a bigger void than ever across the design services spectrum".*

6 of the Academic/Practitioners agreed that there was a common understanding between education and industry regarding what constitutes creativity in graphic design. There were two key reasons given. One related to the amount of interaction between both in terms of developing curriculum content. The other related to the level of involvement in teaching by industry practitioners through providing live briefs. For example, Participant 9 explained that *"we have recently re-written our curriculum and taken advice from creative directors, designers and alumni regarding its content and methodologies. Creativity was not a specific focus but implied as an essential aspect of critical thinking, visual awareness, aesthetic judgement and the design process".* On a less positive note Participant 13 argued that *"academics were/are practitioners in their subject. As creativity in graphic design is less understood than in other areas of the arts some of these common understandings may be mutually naïve. It is the responsibility of graphic design academics to be more cognizant of current thinking about creativity in order to be more critical within their own discipline".* Participant 8 agrees explaining that *"the academic might look for creative solutions in a student assignment that whilst inventive might be utterly inappropriate for a commercial market. The industrial client looks for an idea that is novel [original] …but which will be applicable to their market sector"*. Discussing a more positive benefit of this interaction Participant 21 argued that *"industry practice will influence educational practice, but equally graduating students will bring new thinking…thus informing and revitalising*

evolving design practice. Industry and education are both working towards a common goal, creative design excellence. A common understanding is vital for a successful design symbiosis to flourish between education and industry".

6 of the Academics could not comment on how much dialogue there was between educationalists and industry regarding creativity in graphic design. The ones that could were only able to comment on the dialogue in terms of their own institution. For example, Participant 5 explained that *"from my own perspective my team and I are in constant dialogue with our roster of industry practitioners. I doubt this is the case for all courses".* Significantly, while agreeing with Participant 5, Participant 3 went on to make the point that *"where the educational institution is situated is significant. London is industry rich, so dialogue is easier than in provincial areas with less opportunities".* The suggestion is that educational institutions with close proximity to significant creative/cultural quarters such as London, Birmingham, Manchester etc. are more likely to have ongoing dialogues with industry than those without.

7 of the Industry Practitioners were unable to comment on how much dialogue there was between education and industry regarding creativity. Of the ones that were the common view was that more dialogue was required, and they recognised the value in this. For example, Participant 15 stated *"my understanding/experience is that greater dialogue between educationalists and practitioners must be forged".* Although providing no reason as to why the view was held, Participant 6 explained *"there appears to be a barrier to this. I would be surprised if dialogue between education and industry was widespread".*

7 of the Academic/Practitioners confirmed that in their view there is not enough dialogue between education and industry regarding creativity. A variety of reasons were given including lack of time, differences in priorities and a lack of consensus regarding what creativity and its role is in practice. Commenting on this, Participant 8 argued that *"ivory towers still exist in higher education. University concentrates on factors within the curriculum that charts student progress and without the pressure of the industry environment is free to self-indulge. Similarly, industry often fails to acknowledge that recruitment of knowledgeable graduates is the lifeblood of their profession"*. Participant 21 argued that it depends on what constitutes a

dialogue *"there are a myriad of variations of what defines a dialogue on creativity between educationalists and practitioners. The process will vary depending on the individuals concerned. I think the dialogue works very well and there is appropriate feedback"*. Participant 8 went on to observe that *"creativity is an exhausted adjective that no longer has currency. It is a tired participant of the sales pitch. So, it requires an effort of will on both sides to stop and contemplate what 'creativity' in graphic design actually means"*. Arguing that there is insufficient dialogue Participant 11 stated *"I don't think there are any agreed definitions or approaches on what creativity is, what it is for and how to judge its effectiveness".*

The Technicians did not discuss the role of creativity in terms of graphic design and were unable to comment regarding whether or not there was either a dialogue or a common understanding between education and industry regarding what constitutes creativity in graphic design.

Creativity in Educational Practice

This theme encapsulates the participants' views in terms of the education of the graphic designer. It considers issues such as the facilitation of creativity in academic practice, evaluating creativity in student work, whether or not students should engage in industry practice, for example through live briefs and placements, and whether or not industry practitioners should be involved in curriculum development. The theme is important as it establishes current perspectives on how creativity is approached in terms of either the education or training of the graphic designer. This theme will be explored further in Chapter Five.

9 Academics confirmed that in their view student creativity can be facilitated to some degree. 2 Academics did not agree but then went on to discuss how the design of activities and providing the right environment could support the development of creativity which it could be argued is facilitating creativity. Several of the academics defined facilitating creativity in this way. For example, discussing activities that encourage the facilitation of creativity Participant 19 argued that *"the process of discussing work, questioning/interrogating ideas and proposed directions does lead to better creative work. I am there to guide, demonstrate and challenge"*. In terms of environmental considerations Participant 17 stated *"I allow the space and situation*

for creativity to take place. Industry allows similar things to happen. You need to feel comfortable in the space for the right things to happen". Although stating that creativity couldn't be facilitated Participant 22 suggested that creativity could be *"stimulated and developed through designed learning experiences"*. Interestingly, Participant 29 explained that *"design education is about providing students with the opportunity to experience working through different projects and giving them a 'route map' to achieve effective outcomes"*. This suggests this academic believes that creativity can be taught rather than facilitated. The difference between facilitating and teaching creativity will be discussed in more detail in Chapter Five, p. 169. Significantly, although stating that creativity could be facilitated many of the academics did not attempt to define how this might be achieved. This, together with the view of Participant 29, suggests that many academics are not clear regarding whether or not creativity can be taught or facilitated or that there might be a difference between the two.

9 Industry Practitioners agreed that student creativity can be facilitated. Some discussed facilitation in terms of activities, methods and techniques, others discussed facilitation through encouragement. The Industry Practitioners had more to say than the Academics regarding how creativity might be facilitated. This may be due to the emphasis in industry on creativity itself and how to proactively develop creativity within projects. The Academics were less focussed on creativity specifically as an outcome. Participant 3 discussed methods and techniques stating that *"there are various ways, methods and techniques that can be employed"*. Participant 24 argued that *"given the right tools students can develop on their own accord and can often facilitate their own self development. The role of the facilitator would be to offer support when needed and provide space to grow".* Participant 32 observed that *"being a strong creative thinker requires practice and intentional effort…Students have great ideas but need to be guided, facilitated to act on them in a creative way. Creativity takes practice".* An interesting observation from Participant 20 regarding academic facilitation was that *"University project critiques are usually criticisms with a focus on dismantling student efforts or projects rather than creating critical thinking and discussion".* In industry critiques focus on critical evaluations. Value judgements of good and bad are made against specific parameters built into the brief. The implication here is that academic critiques become personal and lack objectivity.

Participant 32 went on to suggest methods for facilitating creativity that included *"encourage focus and be single-minded in pursuit of an idea, a random approach is self-indulgent. Encourage broader interests in mediums, subject matter and life, a fertile mind open to wider experience is better equipped to deliver creativity. Encourage interaction to develop ideas within peer groups and beyond".* This comment focuses on the importance of developing a strong knowledge base outside of the immediate discipline from which to draw in order to create. It also recognises the importance of working with others outside the group in terms of facilitating creativity.

All the Academic/Practitioners (9) considered student creativity could be facilitated and had the most to say regarding approaches to facilitating. A significant number discussed facilitating creativity through developing critical thinking recognising the relationship between critical thinking and creative thinking or ideation. For example, Participant 8 argued that *"it is a fallacy that the young represent innovative thinking. They may be the most conservative of thinkers. Many replicate ideas, concepts and techniques that prevail in popular culture, often failing to tailor the solution to the brief".* Participant 8 went on to suggest that facilitation includes *"techniques in creative thinking, especially with an emphasis on research. Students understand that the mind is like a reservoir, if this is empty there is little to draw upon.".* Participant 9 agreed stating that *"creativity can be nurtured and facilitated, it is about giving students the frameworks and intellectual tools to enable creative thinking and problem-solving methodologies, and time to practice these essential skills".* Participant 13 argues that creativity can be facilitated but not taught directly observing that *"as creativity cannot be pinned down directly teaching it didactically can do more harm than good. Students should feel they are pushed academically and technically but should feel that if they are experimental and it fails this will be treated as a valuable exercise and rewarded [through marks]".* Participant 11 agreed arguing that the student should be encouraged to define creativity for themselves stating *"rather than being told what creativity is, students need to be encouraged to experiment and play with the concept of creativity so that they can come up with their own philosophies and definitions".* Participant 13 went on to discuss the importance of the environment in facilitating creativity arguing that *"the way to enable students of design is through creating a stimulating environment. This*

includes both the physical space of the studio/workshop but also the social environment. A student should feel they are in a safe environment that both challenges and protects them".

The Technicians (2) agreed that student creativity could be facilitated. Participant 12 agreed with the Academics and Industry Practitioners that students are not naturally critical in their work and argued that *"students have to be nurtured and taught to have a critical eye".*

The evaluation of creativity in student work in higher education is contentious because it is subjective making it difficult to assess. Due to this, academics tend to look for objective measures that can be directly linked to learning outcomes. The academics in the survey addressed the evaluation of creativity in student work in terms of process and deliverables. Process was considered in terms of critical thinking and problem solving in response to the client brief and the strategies underpinning the work, evaluation of the processes undertaken, and the quality of the outputs/deliverables in terms of making. They all acknowledged assessment of creativity is difficult. Participant 10 observed that colleagues from other disciplines find it difficult to understand how creative work is marked as it appears to be a subjective decision stating that *"no doubt colleagues would be 'freaked out' by the marking of design work. I mark creative work holistically looking at deliverables and the design work".* Participant 3 discussed evidence in terms of critical thinking stating *"I look at the creative thinking and decision making. I look at the iterative processes and mistakes and see how these have determined the final result".* Observing that assessment is difficult Participant 4 confirmed *"I look for originality and comprehension, experimentation, exploration and curiosity".* Participant 19 referred to the standard model adopted in UK higher education stating that *"our model is to review the 'evidence' – breadth of exploration, research sources, development and testing examples, levels of reflection etc".* Participant 22 discussed evaluation in terms of meeting the objectives set out in the client brief stating that *"I look for understanding of the brief and audiences. How does theoretical and audience led research inform the solution (including market insights). What is the design strategy that underpins the solution and what is its rationale? Does the solution answer the brief? How have the ideas been crafted and communicated?".*

The Industry Practitioners in the main evaluated creativity in student work in the same way as the Academics by addressing the creative process. Issues such as the utilisation of creative thinking in developing strategies and its significance in supporting problem solving were considered. Also, the importance of undertaking research in support of creative propositions. However, several focussed exclusively on what it means to be creative in the commercial environment. Like the Academics, creativity was measured against the parameters set by the client brief. For example, Participant 6 explained *"I review how much ground-work has been completed in order to understand their subject. Examination of the process and logic involved. Examine how they had interpreted the brief and imparted their own ideas to bring the proposal to life. What is the substance behind their rationale?"* Significantly, Participant 17 commented on the role of creativity in graphic design stating that they look for *"thinking outside the box, inspiration, originality in terms of problem-solving and whether or not it adds value to the human experience".* Equally, Participant 31 considered creativity in its commercial context stating *"does the student 'truly' understand the brief, do they know the opportunity. Is the concept 'smart'; something competitors couldn't do. Does the audience strongly connect, will they be emotionally involved?"*

The Academic/Practitioners also considered the evaluation of student work in terms of creativity by discussing it in terms of process however they discussed the significance of setting parameters for what constitutes creativity in the context of graphic design. They also cautioned against the prevalence of imitation amongst students with Participant 8 stating *"the assignment should demonstrate originality and not simply imitate constructs, styles and concepts in prevailing popular culture".* Participant 9 discussed the evaluation of creativity in terms of making commenting that *"a student can be evaluated on the creative material exploration, all of these are 'flavoured' with creativity in terms of intellectual, playful, ambitious and unexpected outcomes".* Participant 13 observed that students and tutors often have difficulty recognising and articulating what makes a solution successful stating that *"this is because they come from an educational background that fostered the ability to recognise 'good work' but not to understand why that work was good or successful. Assessment should be transparent to the student…When discussing the*

assessment of creativity with students it is important to be clear about what you are talking about with the parameters clearly stated".

In discussing how student work should be evaluated in terms of creativity the Technicians emphasised the importance of the visual appearance of the work, the level of originality involved, clarity of information provided and the development of ideas. The use of critical thinking in terms of developing creative work was not discussed.

All of the Academics (11) agreed that students should be involved in industry practice either in terms of work experience or engagement with live client briefs. Participant 22 confirmed *"it builds confidence and develops professional skills".* However, Participant 1 cautioned against too much industry input stating *"too much reliance on industry and 'live' briefs can stunt the student's creativity".* This is probably due to the parameters set within client briefs that do not necessarily allow for creative exploration due to commercial restrictions. Whilst this is a necessity in commercial practice, educational settings should also provide the time and space to explore new things for the sake of it as a means of developing a students' abilities. Participant 4 agreed arguing that *"There are many modes of working creatively, some are more academic e.g. what does it mean to be a human now? Some are more industry led e.g. how can we get younger people to drink more martini? Neither is more creative than the other".* Students need to be exposed to both, however only in the educational environment will students ultimately have the luxury of time to explore ideas for the sake of developing their creative abilities.

Like the Academics, all of the Industry Practitioners (10) agreed that students should be involved in industry practice. Whilst they discussed the value in terms of working on live brief's they also mentioned the motivational value of working alongside professional designers and the development of professional skills in terms of employability, specifically those not addressed in education such as general agency administration, working to timesheets and budgeting and client etiquette. For example, Participant 17 explained *"I think it is important for students to experience a flavour of what it is like in the 'real world' of work…before they leave the 'safety of school"*. However, Participant 17 cautioned about introducing students to industry too early stating that *"I don't think this should be encouraged too early in their*

education as there is a lot of valuable theory to be taught first which cannot be gained through an apprenticeship or placement". Participant 24 indicated the value of networking stating that *"It outlines the potential for role models and provides the time to make contacts and links".* Significantly Participant 31argued for the role of creativity in graphic design to be experienced first-hand stating that *"exposure to smart creative is essential. If the student is a creative thinker, they will absorb the 'why' and the 'how' which will influence their own applications: they will standout if they are naturally inquisitive and able to apply learning".*

All of the Academic/Practitioners (9) considered students involvement in industry practice to be essential. The reasons given were the same as those provided by the Industry practitioners in terms of experience, professional skilling and confidence building however a number of other insights were provided. For example, Participant 8 confirmed that *"The workplace environment also presents situations that might not occur in even the most realistically conceived curriculum. For example, one of the most common revelations is their astonishment at the shortness of some deadlines. Another is that client meetings could involve conflict and entrenchment".* Picking up this theme Participant 20 commented that *"Academics are measured in their feedback to students, but clients are not, they often don't pull their punches – trying to prepare students for this reality is a challenge".*

The Technicians also agreed that students should be involved in industry practice but provided a word of caution with Participant 12 explaining the quality of the work placement is important *"it is important to place the student in a company where they are not designing to an agency template or house style, although they may be required to work with a client house style".*

All of the Academics (11) agreed that industry practitioners should be involved in curriculum development. This was either discussed in terms of providing live client briefs or developing professional skills, however a number of other insights were also presented. For example, Participant 4 stated the importance in terms of *"keeping the projects contemporary and lively".* In contrast Participant 10 argued their involvement should be annual not constant arguing that *"industry doesn't understand the structure, issues and limitations within Higher Education".* Participant 27 expanded on this point indicating that curriculum development is out

of touch with industry requirements stating *"universities cannot continue to pretend to have a separate agenda to industry. We need to listen to what they want, figure out what they need (these might be different) and then put student learning in that context".*

9 of the Industry Practitioners agreed that industry should be involved in curriculum development as only they know what they want from graduates. They were quick to point out what they perceived as the huge chasm between graphic design in an educational context and in an industry setting. For example, Participant 16 argued that industry involvement would *"help courses to be more relevant to the real world and prepare students as there is a huge gap between an educational setting and the real world".* Participant 23 provided specific details of what their involvement might be stating that rather than just come in occasionally with a live brief *"industry practitioners should be more involved in the planning and development of the curriculum as a whole".* However, Participant 6 provided an alternative view by suggesting that *"a graphic design degree is more than vocational training. It is also an education that needs space to allow development of creativity and experience".*

All of the of the Academic/Practitioners (9) considered industry practitioners should be involved in curriculum development. Reasons provided included those already discussed but also referenced the limited experience of academics no longer working in industry, the experience of current practitioners in terms of industry developments and the continually changing requirements and expectations of the industry in general. For example, arguing that industry practitioners are more conversant with emerging social trends and issues that might influence the nature of future work, Participant 9 stated *"Industry practitioners are conversant with real world problems and have an awareness of the nuances, moods and trends that prevail in society".* Participant 11 commented on academic experience of real- world issues stating *"if a course has a predominantly full-time academic profile then the injection of new ideas from industry practitioners can be useful".*

The Technicians agreed that providing industry with suitably skilled students was important. Participant 30 confirmed that *"industry practitioners should be central to curriculum development… it is essential to provide quality education appropriate to the needs of students in an ever-changing industry".*

Creativity in Industry Practice

This theme represents the participants views regarding how creativity is viewed in industry practice, particularly in terms of its role. It considers views expressed in terms of the client relationship and input, collaboration, and the tensions experienced between design practitioners and clients. Significantly, it addresses the differences in expectations between education and industry in terms of creativity in practice. All participants acknowledged the importance of the client as part of practice except those academics who do not engage with industry in any capacity. The theme will be explored from a contextual perspective in Chapter Six.

Of the Academics that discussed the significance of the client relationship to creativity (6), all but one was positive. Most described the client relationship in terms of their input in providing information or the benefits of collaboration. For example, Participant 5 stated that *"great creative work comes from the collaborative process including client collaboration. Involvement with others facilitates this [creativity]. The client has intimate knowledge and understanding of the issues. Client information is needed to bring about appropriate and relevant ideas".* Significantly there is acknowledgement here of the role of the client in identifying when creativity has taken place due to the 'appropriateness and relevance of ideas.' Equally, Participant 29 confirmed *"a client is vital to a graphic design project…they will set the parameters [for the creative brief]".* By comparison, Participant 1 confirmed that *"sometimes the client is a hinderance to creativity".* Although not specified this may be down to issues such as time, costs, or lack of openness to new or alternative ideas.

The Industry Practitioners discussed creativity in terms of the client relationship, the benefits of collaboration and client constraints. There were two distinct approaches to working with clients discussed. 5 Industry Practitioners suggested that the client was part of the creative 'team' and that building a good rapport with them was integral to a successful outcome. 4 Industry Practitioners however, confirmed that as the client ultimately has the final decision the relationship is not equal. This discrepancy reflects the nature of practice. Larger agencies hired specifically for their creative skills are more likely to build working relationships with clients, especially when they have pitched for and won the work. They actively seek long

term relationships with clients and work to build trust. Smaller agencies (often freelancers) are in a weaker position in terms of influencing clients and may be working on a project-by-project basis on what is commonly referred to as jobbing work. This by its nature is likely to have less potential for creativity. For example, Participant 6 explained *"after initial briefing I demonstrate my comprehension of the brief…the client is then involved in all subsequent stages of the creative process from conception to delivery. My client expects creativity as part of the offering… the provision of a range of design options early in the process shows targeted creative possibilities. It is essential to give the client confidence that my solution will deliver so they are part of the [creative] journey and able to input ideas. Clients are experts in their field so the partnership that develops encompasses expertise in both design and end user understanding"*. By comparison, Participant 25 confirmed that *"I see my role as to advise the best solution, but I accept that clients ultimately have the final decision".*

The Academic/Practitioners discussed creativity in terms of how much influence and involvement the client should have in a project, that clients set the parameters for creative work and that ultimately the client controls the project. They were less positive in terms of building client relationships than the Industry Practitioners and were more likely to follow the client lead however this probably reflects the fact that as part time academics their industry practice is freelance in nature and subject to the dynamics discussed above. For example, in discussing how much involvement the client should have in a project Participant 21 confirmed that *"obviously they are involved in the initial briefing and ultimately must sign off and pay for the final designs. Generally, the client lets the designer work autonomously through the creative process and then either accepts the final designs as presented or requests revisions".* This suggests the client has no direct involvement in the creative process within the project and is only involved in the initial briefing and final sign off. Equally, Participant 18 confirmed that *"the client is not involved in the creative process directly, but if they are paying the bills you have to respect that".* This suggests the client has some input however in this case it is probably as work is completed and presented rather than during the creative process itself. That the client ultimately pays for the work appears to be a consideration here in terms of providing the client with what they want perhaps rather than what they need. Participant 8

stated that *"this is one of the most contentious elements of the design process by how much should the designer allow the client to influence the outcome? ...Many require replication of a concept they have already seen in other designs".* This is a common concern in smaller 'jobbing' work where smaller clients will seek to piggy-back on existing creative work produced elsewhere in order to save research investment and risk taking with new concepts. This is a purely financial consideration.

The Technicians confirmed that the client controls the project and they follow direction. There is no suggestion of a relationship being built with a client or that they attempt to persuade or inform the client in terms of creative solutions. For example, Participant 12 explained that *"the client should have an idea of their market audience and may also be a representative of that audience".* This would seem to suggest that the designer believes the client to be the expert in terms of information and knowledge and therefore the individual best placed to make an evaluation. There is no suggestion that the designer might seek out new information or knowledge in support of creative ideation or that there is a requirement or even preference to do so.

9 of the Academics considered there were tensions between being creative and commercial in graphic design. Several reiterated the point discussed earlier that not all commercial work has the scope for creativity. However, Participant 4 observed that *"commerciality is just another sort of creativity in design".* Participant 5 discussed the tension in terms of risk-taking suggesting that *"some ideas are more 'creative' or risky and commercial factors often shy away from risk".* Participant 10 argued that *"some work, that has artistic merit, or is perhaps experimental can sit alongside commercial work".* This implies that creative and commercial work are not viewed in the same way and that there is not an expectation that commercial work could be really creative. Interestingly, this participant discusses creativity in terms of artistic rather than commercial practice suggesting that creativity is considered as an artistic endeavour but not a commercial one. Participant 19 discussed the industry perception that educationalists are out of touch with industry because full time teaching is all consuming and the fact that many academics believe this to be the case. However, this was explained and defended in terms of focus and perspectives *"commonly, the commercial focus is on practical skills whereas the*

educator's perspective encompasses a far broader, holistic picture". Participant 27 observed that creative and commercial are often not the same describing them as opposed to one another *"if the point is to make a poster that sells a product some solutions might be wonderfully creative, but if they don't end up selling the product it is bad design (even if it might be excellent art). Sometimes being creative IS commercial but other times it is a distraction from the intention of the work".*

All of the Industry Practitioners (10) considered there were tensions between being creative and commercial. The most cited tension across the practitioners was the issue of time and money. All observed that creative work needs time and time may be prohibitive in a commercial setting. Many of the reasons given were the same as those provided by the academics but other issues were also raised. For example, Participant 6 made the point that *"industry needs a supply of appropriately trained talent however students need a rounded education".* The implication here is that training and skilling are required by industry while academics seek to provide a more intellectual education. The two are discussed as being opposed to one another rather than complementary. Participant 14 also discussed creativity as something 'other' in terms of practice observing that *"tensions arise when profit comes before creativity… It is about striking a balance between the two…the most creative projects either don't pay at all or very little which won't be given much thought in the work-flow plans".* The suggestion here is that creativity takes time. As commercial projects are built and costed on time the longer it takes to reach a creative solution the less money the agency will make unless the design process is managed carefully by the account handling teams. Their role is to manage client expectations and to persuade clients it is worth investing in more time to get the creative right. Participant 16 also raised the issue of time arguing that there is a *"massive conflict between time versus money…clients often need educating about the amount of time it takes to do a creative task".* Participant 23 raised the issue discussed by some of the academics that creativity is often associated with artistic not commercial practice however makes the point that this should not be the case as good design and creativity work together *"unfettered creativity becomes creation for the 'self' instead of creation for 'someone else' – hence drifts into art rather than design. Acknowledging and resolving those natural tensions is critical to successful design".*

8 of the Academic/Practitioners considered there were tensions between being creative and commercial. The ones most commonly discussed were the same as those provided by the Academics and the Industry Practitioners and related to risk-taking, time in relation to costs, that creativity takes time, and the discussion regarding creativity in graphic design being considered self-indulgent or treated as fine art practice. By contrast Participant 13 argued that the tension between being creative and commercial should not be considered a negative but part of what constitutes design practice stating that *"sometimes the tension becomes the catalyst to a creative solution"*. Participant 21 agreed arguing that *"within 'commercial art', the client brief and expectations may not necessarily be fully synchronised with the most creative solutions from the designer's perspective. There is inevitably an element of compromise. The creative element will never have the free reign that it enjoys in fine art…as there are always two participants in the graphic design process the client and the designer".* This participant is alluding to the fact that creativity in graphic design works within parameters and it is these parameters that separate fine art practice from graphic design practice.

The Technicians referred to the same issues of time and cost in relation to the tensions between being creative and commercial as the Academics and the Industry Practitioners.

Summary

There was a good deal of engagement with the survey and this is reflected in the richness of the answers provided. Many of the participants made contact after taking the survey to say thank you as they found it useful and thought provoking. They recognised and confirmed the significance of the survey both as part of the overall research study and at a personal level. Although the survey contained discrete questions there were overlaps which enabled a seamless transition from one question to the next. The questions asked for examples of practice making the answers applied rather than purely theoretical. This prompted a good level of enthusiasm for the survey. It was the requirement to consider their practice from an applied perspective that the participants found particularly useful.

The survey established that the concept of creativity holds different meanings for design practitioners. Design education and the design industry approach creativity differently. Many educationalists appear to have difficulty expressing explicitly what the role of creativity and its value is in the context of commercial practice. Industry practitioners recognise that there are specific qualities and skills involved and that these need to be considered, however they are not in a position to understand how they might be addressed in educational practice or what the constraints against this might be in this context. The majority of the participants recognised the significance of the relationship between creative/critical thinking and making. They confirmed that both are important and integral to design practice and what a designer does. Critical thinking in particular was considered a significant part of practice and an aid to creativity. The main differences in response between the groups related to what and how they considered their practice. For example, the Academics were student focused when evaluating creativity within the discipline while the Industry Practitioners considered the commercial implications of creativity. Focus for the Academic/Practitioners showed how different priority areas affected their responses i.e., whether they were considering their response in terms of their teaching or design practice. All the participants confirmed creativity to be of value to their practice. There was a correlation between the job roles captured by the survey and the understandings demonstrated. This concurred with the expectations of the researcher. The ability of the survey to bring together views from all groups within all areas of practice was the most useful aspect of the survey. It enabled the development of understanding of creativity and its role in the context of graphic design.

Conclusion

The qualitative survey was a useful analysing exercise that enabled the testing of the theoretical framework. It confirmed the speculations presented in the foreword and validated the objectives for the study. It facilitated reflection within the combined community of practice and provided a snapshot of current understanding from those individuals most likely to have special knowledge about the research topic. It identified current understanding of the significance and role of creativity within design practice and highlighted the need to identify common terms that might be used to describe creativity, especially in terms of the writing of subsequent chapters

in the thesis. Whilst there was no consensus amongst the groups regarding what constitutes creativity within graphic design practice there was agreement regarding its benefits. The survey confirmed the need for parameters to be set as a means of defining creativity especially in terms of its role and value in both educational and commercial practice. It also identified the need to understand the relationship and significance of critical thinking within the creative process and to recognise the difference between creating and making within design practice. The issues raised within the study will be addressed thematically within subsequent chapters that will seek to address why certain perceptions have come into being across design practice and make recommendations for how to address these in support of future practice.

Chapter 2 - What is Creativity?

Introduction

The graphic design survey indicated that within the context of graphic design there is no consensus amongst practitioners regarding what constitutes creativity. However, feedback from the survey identified two main views regarding its characteristics. The first is that creativity can be demonstrated through the application of skills associated with the making of artefacts. The second is that creativity involves a special kind of cognitive intellectual skill. Whilst the two are complementary in terms of practice they can be viewed as opposites and historically this has been the case. Although the survey participants did not use the same terms and definitions when discussing creativity, the majority identified that there is a significant relationship between creativity and critical thinking within design practice. This chapter argues therefore that it is through the combination of the creativity involved in the making of artefacts and the special intellectual cognitive skills of enquiry (critical thinking) that the role and value of creativity in graphic design can be found.

The aim of this chapter is to examine theories and definitions of creativity as understood within Western European culture in order to lay down a framework and provide a definition in support of further discussion within the thesis in the context of graphic design. Understanding these perspectives is important because contemporary views regarding creativity, including those of the participants within the survey, have been shaped by these perspectives. Identifying what constitutes creativity in the context of graphic design is important as it influences perceptions regarding its role. Kaufman and Sternberg (2010, p. xiii) confirm that there are growing communities of scholars with a focus on creativity working across disciplines as diverse as, for example, neuroscience, artificial intelligence, music, and design. As such there are different theories and definitions within different disciplines and there is significant published work in this area. Due to the volume and diversity of the literature therefore, the chapter provides a thematic understanding of the nature of creativity in relation to the research question by drawing on key approaches and ideas.

Theories of Creativity

Aaron Kozbelt, Ronald A. Beghetto and Mark Runco (2010, p. 21) explain that not all theories of creativity are alike. Therefore, as there is no universally accepted theory of creativity, a number of alternatives drawn from Western European perspectives are considered in order to provide a broad understanding of differing insights. These will be grouped into two areas of intellectual discussion: philosophical and psychological and evaluated in the context of contemporary approaches to creativity.

Philosophical Interpretations of Creativity

According to Deborah J. Haynes (2014, p. 92) there are three key philosophical approaches to creativity in Western European culture that have been enormously influential in all subsequent philosophies of creativity. They can be traced to Plato, Aristotle and Kant respectively. These approaches not only discuss creativity in terms of 'creation' but also 'making' and as this distinction is important in the context of this thesis it is considered in detail within this section. Educators in particular need to be clear about this distinction when they assert that creativity is a key intellectual skill that students should both learn and practice. This discussion will be taken up in more detail in Chapter Five.

Divine Creation

James T. Wang (2015, p. 4) and Milton Nahm (1947, pp. 363-372) argue that there is an essential difference between creating and making that can be traced back to metaphysical and theological differences between the Classical Greek and Hebraic-Christian accounts of the beginning of the world. They observe that today there is an assumption that the artist (or designer) has the cognitive ability to transcend natural laws to produce something individual, unique or novel. Whilst they do not name this ability specifically what they are referring to is what the twentieth century philosopher Benedetto Croce (1953, p. 1) called 'intuitive expression' or what we today would call the imagination. By way of example Wang (2015, p. 5) cites William Blake who asserts in *The Marriage of Heaven and Hell* (1790) "*One power alone makes a poet – Imagination, the Divine Vision*". In his poem *The Tyger* (1794) Blake asks "*Did he smile his work to see? Did he who made the lamb make thee?"*

According to Wang (2015, p. 5) literary critics such as Northrop Frye, Lionel Trilling and Harold Bloom argue that Blake's Hebraic-Christian God did not 'make' the universe by following the laws of nature inherent in physical being but argue instead that this God 'created' the universe by an act of vision (imagination) that transcends rationality and the laws of nature. They suggest that the God of *Genesis* is free to create by performing miracles and therefore the artist who emulates God is also free to produce unique works that do not rely on rationality and explanation. Wang (2015, p. 5) and Nahm (1947, p. 365) argue that artistic creation is analogous to divine creation because in accordance with the medieval philosophical tradition of both Augustine and Thomas Aquinas, where God created the world *ex nihilo* (out of nothing), the artist is also capable of creating something out of nothing through the exercise of imagination.

By contrast Wang (2015, p. 5) and Nahm (1947 pp. 363-372) confirm that the ancient Greek idea of the origin of the world emphasises making rather than creating. For example, in the *Timaeus* (c. 360 BC) by Plato the narrative describes how the 'demiurge' converted (or made) chaos into the cosmos through the imposition of eternal forms or ideas upon formless matter. This form making was accomplished through rationality rather than by imagination. Significantly, the eternal forms and the matter they transformed already existed. In this paradigm the maker does not create something individual or unique from nothing using the power of imagination but instead causes (makes) something individual or unique to emerge through the exercise of rational thinking and physical perfecting. A uniquely made object therefore is the best example of its type rather than something created completely new. This point will be discussed further in Chapters Three and Five in relation to creativity in design practice. Wang (2015, p. 6) argues therefore that what Plato is suggesting is not that a maker does not use imagination but that imagination in this context is not the only cognitive ability involved in producing objects. Rational thinking is also important. This point was also made by many of the participants in the graphic design survey when describing the design process. In order to understand the role of imagination in making Wang (2010, p. 6) refers to Aristotle citing *De Anima* (c. 350 BC). Here Aristotle argues that imagination mediates between the senses and intellect. For Aristotle the most important feature of imagination is that it can embody form within the mind and can test the viability of

ideas produced by the intellect without the need for material form. In Aristotle's conceptualisation of making, what he referred to as 'techne', imagination and reason work together to produce objects. This will be discussed in more detail in Chapter Three, p. 102. Rationality recognises forms in the abstract and imagination develops content that makes forms visible. It is this combination that is the central and distinctive feature that separates the ancient Greek concept of making from the Hebraic-Christian concept of creation. For Plato and Aristotle, making begins with intelligible eternal forms while for God in The Old Testament, form does not exist until it is uniquely created by imagination.

Divine Inspiration

The earliest discussion of creativity can be found in Plato's *Ion* (c. 395-399 BC)[6]. Here Plato suggests that creativity is dependent upon a muse or external divine power that provides inspiration to the creator. The emphasis is on the creator as a receiver rather than a transmitter of inspiration. However, Haynes (2014, p. 92) argues that Plato's view of divine inspiration and creativity cannot be separated from his understanding of imagination observing that in the *Republic* (c. 381 BC) Plato expressed a view of imagination as an inferior capacity of the mind and a product of the lowest level of consciousness. Products of artistic creativity were considered part of the divine and irrational world of belief and illusion and as such were considered inferior to philosophy and mathematics that were considered rational and higher forms of knowledge. For Plato therefore, human creativity was mimetic and derivative. This will be discussed in more detail in Chapter Three, p. 102.

Creativity and Genius

Later philosophical theories of creativity defined it as a highly developed form of intuition. It was considered rare and was associated with a particular type of creator, the genius. The idea of genius originated in the late Renaissance when it was applied to the creativity of artists such as Leonardo da Vinci (George Kneller, 1965 p. 22). During the eighteenth-century philosophers, including Immanuel Kant in his

[6] Scholars continue to disagree about the actual date of the *Ion* but include it in the earlier writings of Plato.

Critique of Judgement (1790), also associated creativity with genius. John White (1992, p. 89) and Haynes (2014, p. 92) confirm that Kant uses the term 'genius' rather than 'creativity' and argues that a genius has the ability to establish new rules, develop new creative works and evolve new styles. As such originality is its first property and these processes are totally dependent upon imagination. David Bohm (1998, p. 3) agrees and suggests that one pre-requisite of originality is the ability to suspend judgement based on existing preconceptions in order to learn something new, even if this means leaving our comfort zone and adopting ideas that perhaps overturn the tradition. This point will be discussed in Chapter Five, p. 197 when considering the influence of tradition within 'communities of practice'. Like the Greek philosophers, Kant considered imagination as a mediator between perceptions of the senses and intellect and argued that imagination fuses the perceptions of the senses and intellect in order to make creativity possible. However, there is an essential difference between the early Greek philosophers and Kant's view of imagination. The Greek philosophers considered imagination as being dependent upon pre-existing faculties of the senses and intellect, however modern philosophers including Kant, argue that the imagination is an autonomous faculty independent of the senses and intellect. In his *Critique of Pure Reason* (1781) and the *Critique of Judgement* (1790), Kant discusses imagination in terms of a free and playful speculative faculty of the mind that is free of purpose suggesting it is this free play that leads to artistic creativity. He also argued that the laws of creativity are unpredictable and therefore creativity itself cannot be formally taught. This point will be discussed in more detail in Chapter Five, p. 170.

Kant goes on to argue that although we might examine creative objects and examine their organising principles, simply applying these principles will not produce original and therefore creative work. This point will be discussed further in Chapter Five, p. 169 in terms of graphic design education. However, Kneller (1965, p. 22) recognises that Kant does acknowledge that there are aspects of the creative process that can be taught and argues that while sources of originality and spontaneity are hidden from rational thought, the materials that reveal these qualities have to be made into intelligible objects. Kant therefore suggests that the shaping of materials (making) requires a talent that has been academically trained so that it can stand up to scrutiny and judgement. This is a view held by many contemporary educationalists and

several academics within the graphic design survey made the same point. However, they argued that creativity can be facilitated rather than taught, and curriculum activities are often devised on this basis. This point will be developed further in Chapter Five p. 169 in relation to graphic design education and practice. According to White (1992, p. 89) Kant goes on to suggest that the products of genius must not only be works of merit providing a standard for others to work to they must also have a place within a tradition in order to have value. This will be discussed further in Chapter Three in relation to the evolution of graphic design practice. Kant's account of genius is different to more contemporary views of creativity within the arts because he considers a genius to be a rare phenomenon whereas contemporary views consider creativity to be something everyone possesses to some degree.

The philosophical approach considered creativity in terms of metaphysical or cosmological explanations and evolutionary theory. Creativity is considered a special activity engaged in by a few rather than something everyone is capable of. It is demonstrated through works of high merit rather than everyday activities. Significantly in this approach the act of creation is separated from the act of making. It is fundamental in the teaching of graphic design today to recognise that the activity being facilitated is either creating or making new designs. Imagination is essential in both activities but envisioning and producing unique or revolutionary form is required of creating whereas producing or perfecting better form is required of making. This distinction is significant in terms of defining the role of creativity within the discipline and is discussed in more detail in Chapter Five. The following section considers creativity in terms of psychological activities. It is in terms of psychological theories, particularly during the twentieth century, that most detailed investigations into creativity have taken place (Kneller 1965, p. 25).

Psychological Interpretations of Creativity

Psychoanalytic accounts of creativity for example, *The Unconscious, Collected Papers, IV* (Sigmund Freud, 1949), emphasise the importance of the unconscious mind in the process and production of being creative. Focus has been given to researching the hierarchical structure of the mind, observing the extent to which creative individuals are open and receptive to the world outside the mind, examining

how the creative process takes place, and the way in which ideas are combined to produce new insights. More recently a major approach to creativity, drawn primarily from cognitive psychology, considers problem solving and problem finding as significant to creativity. This theory continues to be influential in the education of the graphic designer and will be considered in more detail later in the chapter. Psychological theories of creativity fall into four main categories: associationism, psychoanalysis, openness, and cognition. These are considered below in order to provide an overview.

Associationism

This theory argues that the more frequently, recently, and vividly ideas are connected the more likely it is that when one idea presents itself in the mind other ideas will accompany it. In associationism new ideas are made from old ones by a process of trial and error. In considering a problem or issue individuals call upon successive combinations of ideas until eventually an arrangement is found that solves the problem or issue. This eventual combination is the new idea. Creative ideation is therefore the activation of cognitive connections that continue until the right combination of ideas presents itself. The more associations an individual has acquired the more ideas will be available and therefore arguably the more creative the individual will be. However, Kneller (1965, p. 26) asserts that associationism does not sit easily with what is understood today in terms of creativity. For example, new or novel thinking means taking previous ideas from their original context and recombining them to form something new and original. This requires the individual to ignore previous connections in order to create new ones. Drawing on the work of Arthur Koestler in his study *The Sleepwalkers* (1959), Kneller (1965, p. 27) argues that adhering to past connections actually hinders the formation of new ideas. Koestler had suggested that the great Renaissance scientists, for example Copernicus, Kepler and Galileo, departed from their past associations to enable themselves to think originally and therefore creatively. As discussed earlier, creating as opposed to making, does not rely on existing form or ideas but is an expression or activity that evolves *ex nihilo* – out of nothing.

Psychoanalysis

Freudian psychoanalysis is the single most important influence on how we understand creativity today. Freud considered the creative process is unconscious thought. This explains why many creators cannot describe or analyse acts of creativity or the creative process itself. They have not thought specifically about what they are engaged in doing and therefore are unable to discuss it. Creativity and the creative process manifests itself from a tacit understanding of the activity rather than a factual understanding and although the creative process can be learned it is not at a conscious level. It was apparent from the graphic design survey that many of the practitioners believed the creative process to be tacit in nature and that whilst creativity can be facilitated it cannot be taught. For example, Participant 7 an Industry Practitioner, stated that *"individual creativity is largely innate* [originating in the mind]. *However, with the right sort of stimulation their* [student] *response to a problem can be steered in a direction they may not have considered and thus their creativity can to some extent be facilitated".*

In his study *The Unconscious, Collected Papers, IV*, (1949, p. 127) Freud argues that creativity comes from conflicts within the unconscious mind and it is this conflict that produces the idea. Eventually the unconscious mind produces a solution to the conflict and Freud (1949, p. 127) argues that if the solution reinforces an activity that was intended by the conscious part of the mind it will result in creative behaviour. However, if the solution is at odds with the conscious mind it will either be repressed or emerge as a neurosis. According to Freud (1949, p. 127) creativity and neurosis therefore share and are driven by the same source, conflict in the unconscious mind. Freud's (1949, p. 127) investigations into these internal conflicts led him to discuss the mind, and therefore the human personality, in terms of a division into three conflicting parts that he named the 'id', 'ego' and 'super-ego'. These divisions are separate aspects and elements of the single structure of the mind that function in different levels of consciousness creating complex human behaviours.

The 'id' operates entirely within the unconscious mind. It is responsible for instinctive and primitive behaviours and according to Freud (1949, p. 127) is a primary component of human personality.

The ‘ego’ is the component of the personality responsible for dealing with reality and according to Freud (1949, p. 127) developed from the ‘id’ to ensure that the impulses of the ‘id’ could be expressed in a socially acceptable manner in the real world. Unlike the ‘id’ the ‘ego’ functions in the preconscious, conscious and unconscious mind. It operates based on the ‘reality principle’ striving to satisfy the ‘id’s’ desires in realistic and socially appropriate ways by forcing us to consider the risks and implications of various decisions or actions. The ‘ego’ does not block the urges of the ‘id’ but works to ensure its needs are met in ways that are safe, appropriate and timely.

The last part to develop is the ‘super-ego’ and is the aspect of personality that holds all of our internalised moral standards and ideals acquired from our parents, society and the culture in which we live. It is present in the conscious, preconscious and unconscious mind. It provides us with our sense of right and wrong and provides guidelines for making judgements. The ‘super-ego’ works to suppress all unacceptable urges of the ‘id’ and attempts to make the ‘ego’ act upon idealistic standards rather than realistic principles.

Freud argued that if individuals are to remain psychologically balanced then socially unacceptable impulses require socially acceptable outlets of expression and Freud identified a number of ‘defence mechanisms’ within the conscious mind that he argued allow individuals to act out unacceptable impulses by converting them into a more acceptable form. Freud referred to this as sublimation arguing that it takes place when emotional expression is redirected or displaced into socially constructive activities such as artistic, cultural and intellectual pursuits. For example, an individual may sublimate their desire to handle faeces with an enjoyment of pottery (Saul McLeod, 2008). In *Psychology* (2000, p. 478), the social psychologists Carol Wade and Carol Tavris express similar views stating that sublimation occurs when displacement “*serves a higher cultural or socially useful purpose, as in the creation of art or inventions”*. However, it would be wrong to assume that all creative impulse is a product of sublimation and therefore a derivative of more primitive drives like sex or aggression - instinctive impulses for which these works of art are substitutes. Kneller (1965, p. 30) recognises that modern psychoanalysts reject the idea that the creative individual must be emotionally disturbed or neurotic arguing

instead that the conscious mind must be flexible and secure enough to allow the individual to move between the conscious and unconscious in order to make discoveries.

In relation to creativity specifically, Freud (1949, p. 127) argued that an individual is able to accept the free emergence of ideas within the unconscious and release the conscious minds control over the unconscious to enable creativity to cross over into consciousness. He argues that the creative individual uses the unconscious in order to create. Freud (1949, p. 127) asserts that behaviour produced by the conscious mind alone, uninfluenced by the creative unconscious, is always rigid and habitual and the unimaginative person is due to an individuals' inability to release the unconscious, and therefore their creativity, from the control of the conscious mind. Freud (1949, p. 127), goes on to argue that whenever the unconscious mind bypasses the conscious mind altogether its products, for example dreams and hallucinations, may be original but have little relation to reality. They are therefore useless creatively because their novelty and originality do not meet the needs of a specific situation that achieves something relevant. The requirement for relevance or appropriateness points to the importance of their role in terms of defining creativity in graphic design and will be discussed in more detail later in the chapter.

Creative behaviour in Freudian psychoanalysis, especially in relation to the arts, is presented as a substitute for and continuation of childhood play. Both Freud (1949, pp. 181-182) and Jacob Getzels and Philip Jackson (*Creativity and Intelligence: Explorations with Gifted Children,* 1962, p. 99) argue that whilst children express themselves through games and fantasies, creative adults express themselves through artistic endeavours. They suggest that the relationship of creativity and childhood is at its most observable in the pleasure creative individual's display when playing with ideas for their own sake and in exploring ideas and situations in order to see where they will lead. Kneller (1965, p. 33) asserts that Freudian psychoanalysis has its opponents and limitations as not all mental states are influenced or determined by past mental states and creativity is not an attempt to recapture childhood experiences. However, more contemporary research suggests that playfulness is an important quality in being creative. For example, Carl Rogers (1959, p. 72) and Getzels and Jackson (1962, p. 99) argue that a condition of creativity is the ability to play with

elements and concepts drawing conclusions from them purely from the pleasure involved in intellectual exploration. Several of the practitioners from the graphic design survey agree confirming that creativity and critical enquiry are complementary activities. For example, Participant 9, an Academic and Industry Practitioner stated that "*To creatively investigate a brief is to find the heart of the problem and to approach it from different perspectives. For me, this is an intellectual and playful engagement with the problem".*

Openness

A further psychological theory that originated with Ernest G. Schachtel in the publication of his book *Metamorphosis: On Development of Affect, Perception, Attention and Memory* (1959, p. 5) is openness. It discusses the concept of creativity as a result of openness to the world and therefore from a greater receptivity to experience. In this theory Schachtel (1959, pp. 241-242) argues that in adolescence and adulthood the self-absorption of childhood gives way to openness to the world and others. However, he observes that during this period a secondary self-absorption develops and whilst this is deemed necessary Schachtel (1959, pp. 241-242) argues it is capable of restricting individual awareness. This is because it initiates a tendency to view things in terms of their usefulness to the individual concerned and the tendency to avoid things that are new or unusual as a threat to what is known. This secondary period of self- absorption occurs during the process of socialisation as the individual becomes aware of the social conventions and responses to the world of the culture in which the individual is found. Creativity therefore is the ability to remain open to the world beyond immediate cultural norms. Schachtel (1959, pp. 241-242) argues that individuals need creativity in order to relate to the world around them rather than to express inner drives and this creativity manifests itself through mental flexibility, an interest in things beyond ourselves, and a variety of approach. Combined with breadth of knowledge (to be discussed later in Chapters Three, Four and Five) and an ability to think critically, being open and receptive to other perspectives are important factors in being creative within graphic design and this will be discussed later in Chapter Five p. 172.

In his paper *Towards a Theory of Creativity* (1959, p. 72), Rogers expanded upon the theory of openness suggesting that creativity is self-realisation, and its motive is self-fulfilment. Like Schachtel (1959, pp. 241-242), Rogers (1959, p. 72) asserts that creativity is based on inner beliefs. Being open to experience and having an ability to respond to things as they are rather than as categorised by social norms, he suggests, demonstrates flexibility in an individual's beliefs and perceptions and a tolerance of ambiguity without the need to force an interpretation. Rogers (1959, p. 72) also argues that another condition of creativity is internalised evaluation but asserts that whilst a creative individual might take into account alternative perspectives of his work, he does not allow them to fundamentally alter it. These are important points in relation to the role of creativity in design practice and will be discussed later in Chapters Five and Six.

Cognition

Cognitive psychologists suggest an alternative approach in which creativity is considered and measured in terms of the analysis of mental abilities. The most influential studies in the psychological measurement of creativity have come from the pioneer J. P. Guilford. According to Guilford (*Creativity* 1950, pp. 444-454, *Personality* 1959 and with P. R. Merrifield *The Structure of Intellect Model: Its Uses and Implications* 1960) the mind or intellect consists of a range of factors or abilities. These can be grouped into two main classes, the smaller one being memory abilities and the larger being thinking abilities. It is the research into thinking abilities that is of interest to this thesis. Thinking abilities can be divided into three categories: cognitive, productive, and evaluative. Understanding productive abilities, convergent and divergent, is important in design thinking and is considered here. Convergent thinking moves towards an existing or conventional answer whilst divergent thinking towards no given answer. Convergent thinking occurs when a problem is given, where the method in solving it is known to the individual and where a solution is guaranteed within a finite number of steps. Divergent thinking by comparison takes place when the problem has yet to be defined and where there is no set way of solving it. Convergent thinking suggests a single right solution to a problem whereas divergent thinking may produce a number of appropriate solutions. This is valuable in design practice when producing ideas for client presentation. Guilford (1950, pp.

444-454, 1959) asserts that educationalists concentrate too much on convergent thinking that only serves to show students how to reach the answers that society considers correct. Whilst evaluation and critical thinking is taught the emphasis is generally that to every question, or design problem, there is only one right answer. This approach is problematic for both creativity and design education and will be explored further in Chapter Five.

In his book, *The Act of Creation* (1964) Koestler also considers thinking abilities and integrates the findings of a range of disciplines into a single theory of creativity. He asserts that all creative processes share a common pattern that he called 'bisociation'. This represents the connecting of previously unrelated levels of experience or frames of reference. This will be discussed in more detail later in the chapter in terms of creative ideation. In creative thinking Koestler argues that individuals think simultaneously on more than one plane of experience as opposed to routine thinking where paths of past association are followed. Koestler suggests that all creative activity is based upon a structure of ordered habits of thought and behaviour and whilst these give coherence and stability, they also provide room for innovation. Any pattern of thought or behaviour he argues is governed by a set of rules that are either learned or innate and possess flexibility in order to react selectively to a range of circumstances.

Contemporary Cognition Theories

The work of more contemporary cognitive psychologists builds on many of the ideas presented so far. In her book *The Creative Mind: Myths and Mechanisms* (1990) the cognitive scientist Margaret Boden likens the creative processes within the arts as being fundamentally similar to those that underpin computer programmes. Her research, which ostensibly looks at intelligence and the mechanisms that underpin it, argues that creativity is experienced to some degree by everyone and is not a special faculty enjoyed by the gifted few. Mihaly Csikszentmihalyi (*Creativity: Flow and the Psychology of Discovery and Invention* 1996, p. 27) and Morris I. Stein (*Creativity and Culture* 1953, pp. 36, 311-322), make the same point in their work. Boden (1990, p. 1) argues that creativity informs virtually all aspects of daily life from science, art, literature and music to more mundane activities such as cooking

and gardening. She goes on to note that it is grounded in everyday abilities such as conceptual thinking, perception, memory, and as discussed by Donald Schön in his book *The Reflective Practitioner: How Professionals Think in Action* (1983, pp. 8-9), reflective self-criticism. Boden's work (1990, p. 2) looks primarily at creativity in terms of the generation of new ideas and asserts that there is new and 'new'. She makes the distinction between an idea that is new to the individual rather than new to the historical tradition. Boden (1990, p. 2) distinguishes the two by referring to 'psychological creativity' – an idea that is new to the individual though not to the historical tradition - and 'historical creativity' – an idea that is new to everyone, including within the historical tradition. For example, a key moment in Western painting was when Brunelleschi[7] discovered third point perspective. When children first use perspective they do not cease to be creative just because Brunelleschi revealed it first. This observation is readily recognised by educationalists.

Within her research Boden (1990, pp. 3-4) asserts there are three forms of creativity. The first of these involves making unfamiliar combinations of familiar ideas and these can either be generated deliberately or unconsciously. She observes that making and appreciating these combinations requires an individual to have a rich store of knowledge (this point will be discussed further in Chapters Three, Four and Five) and the ability to move around within the mind in many different ways. She also argues that if these combinations are to be valued by the individual then they must have some point. Her observations reinforce the point made earlier by White (1992, p. 88) that even if the ideas are brought together randomly, they only have value if we can make some sense of them. Several participants from the graphic design survey described creativity in this way with Participant 6, an Industry Practitioner, stating "*[creativity] is the action of assimilating ideas, experiences and knowledge to arrive at an outcome that addresses a challenge or requirement in an original way… creativity does not necessarily have to be entirely original it could be a different way of looking at a known perspective…".*

[7] Giotto (c.1267-1337) and Duccio (c. 1255-1260 – c. 1318-1319) are credited with introducing an early form of perspective using shadowing to create an illusion of depth but Fillipo Brunelleschi (1377-1446) is credited with the first painting to make use of linear perspective.

The second form of creativity is in the exploration of conceptual spaces. Boden (1990, p. 4) defines conceptual spaces as structured styles of thinking and these she asserts are generally picked up from our own culture, peer group or occasionally borrowed from other cultures. Importantly, wherever these structured styles of thinking originate, they already exist and have not originated through the individuals own mind. An example of this kind of shared, structured style of thinking, provided by Boden (1990, p. 2) herself is that of the artistic movement and form of expression known as Impressionism. The Impressionist painters displayed a way of thinking that was both familiar and valued by the group. Within a given conceptual space, Boden (1990, pp. 2-4) notes that many thoughts are possible, only some of which have been thought before. She also observes that some spaces have more potential than others for example, the potential moves available in a game of noughts and crosses is significantly limited compared to the that of chess. Whatever the size of the space, someone who comes up with a new idea within that style of thinking is according to Boden (1990, p. 4), being creative in an exploratory sense. Exploratory creativity is valuable because it offers possibilities that have not been seen before. Exploring within known parameters, for example a style of painting, may be known territory but it may lead to something else, something new. The potential 'new' thing may always have been there waiting to be discovered, like in scientific breakthroughs, but the idea is new all the same. In graphic design, defining and agreeing the client brief sets the parameters within which creativity can take place. On the basis that parameters confirm relevance and appropriateness, creativity can easily be observed and measured.

Finally, Boden's third form of creativity is that of transforming the conceptual space (1990, p. 5). Our current understanding of our 'space', recognised and understood by our 'community', can change and it is creative thinking that changes it. She suggests a particular style of thinking can render certain thoughts impossible i.e., 'unthinkable'. However, we can change our style of thinking – consider the strategy of 'thinking outside the box' advocated by Edward de Bono in his book *Lateral Thinking* (2016 [1970]). De Bono defines lateral thinking as a means by which the brain steps outside the normal barriers of logic, custom and culture. In doing so it encourages creative thinking by stepping outside the normal thinking process. Boden (1990, p. 6) argues that the deepest cases of creativity involve an individual thinking

something that, in terms of their conceptual spaces, could not have been thought before. This is the 'impossible idea' that can only come into being if the creator changes or radically transforms the pre-existing idea in some way. To understand how exploratory or transformational creativity can occur the mental processes involved in exploring and modifying them require further investigation and this is where Boden (1990, p. 7) suggests research utilising computers and artificial intelligence has value.

Problem solving

A major perspective on creativity drawn primarily from cognitive psychology emphasises problem solving as a process and its relationship to expert knowledge for example, K. Anders Ericsson (1999), and Robert Weisberg (1999 and 2006). This perspective argues that domain specific expertise is necessary for significant creative achievements and traditional cognitive psychological concepts like problem representations and hands on approaches explain how individuals generate creative solutions to problems. This will be discussed in more detail in Chapter Five pp. 191-198 where knowledge, domain specific expertise, the critical thinking associated with problem solving, and learning by doing are considered. In their book *Theories of Creativity* (2010, p. 33) Kozbelt *et al* argue that in this approach, like the creative cognition approach, creative thought ultimately comes from mundane or non-creative cognitive processes that researchers refer to as small c creativity. However, expertise-based theories usually focus on what researchers refer to as big C Creativity.

Kozbelt *et al* (2010, p. 33) assert that the principles of problem solving equally apply to problem finding. This is particularly the case in graphic design where defining the brief requires the same creativity as proposing the solution. These problems have goals that are not necessarily pre-specified and accept more than one 'good enough' solution rather than one 'correct' answer. Kozbelt *et al* (2010, p. 33) observe that in this perspective, big C Creativity typically emerges from the application of a domain-specific expert-knowledge base that has been acquired over a long period of intensive study. Expertise they argue, profoundly affects performance and cognition and experts remember domain relevant patterns of cognition better. Kozbelt *et al*

(2010, p. 33) and K. Anders Ericsson and Neil Charness (1994, pp. 725-747) argue therefore that experts are more able to generate effective problem representations and can be observed to engage in efficient forward reasoning in problem solving rather than backward reasoning. These advantages clearly facilitate performance in more creative domains such as graphic design. The problem solving and expertise theory considers creativity as a rational phenomenon that Kozbelt *et al* (2010, p. 34) argues lends itself well to strategic guidance and long-term learning. This is why it is favoured pedagogically. Equally, the perspective that expertise is significant in big C Creativity is important because it reinforces the view that large amounts of relevant background knowledge are required within creative practice. This point was made by many of the practitioners within the graphic design survey. However, Kozbelt *et al* (2010, p. 34), argue that whilst the problem-solving and expertise perspectives are necessary to creativity, they are not sufficient and there are other factors that contribute to high-level creativity. These will be discussed later in the chapter in terms of critical thinking.

Contemporary Definitions of Creativity

The previous section has indicated that creativity is a difficult phenomenon to define easily and there are many theories on which to draw. Equally, creativity is often confused with other attributes such as intelligence, a sense of order, or equated with the unconventional. However, these can be indicators to creativity rather than creativity itself. This section considers contemporary definitions of creativity that have evolved from the theories discussed above and provides a definition of creativity that will be used in subsequent chapters.

There are two main routes to consider when approaching the topic of creativity: creativity as an object and creativity as a process. White (1992, p. 89) identifies that creativity as an object focuses on works of art, publications and musical compositions etc. that can be viewed or heard in order to be evaluated. However, Kozbelt *et al.* (2010, p. 24) argue that the difficulty with studying an object is that little can be said regarding the process leading to it, or the creator's personality, and inferences are therefore necessary to understand the creative process or person. By contrast creativity as a process focuses on understanding the nature of the cognitive

mechanisms involved when someone is engaged in creative activity or creative thinking.

Although creativity itself, and what it means to be creative, is clearly defined within the literature there is no consensus amongst researchers and therefore no single authoritative definition (C. W. Taylor, 1988 pp. 99-125). This goes some way to explaining the lack of consensus amongst the practitioners in the graphic design survey. Additionally, M. D. Batey (2007, p. 19) and Mark Runco (2004, pp. 657-687) argue that the theoretical perspective of a particular researcher often defines how they attempt to assess what constitutes creativity. For example, researchers that emphasise a person-centred view of creativity tend to assess it in terms of personal attributes such as intelligence or personality, researchers who emphasise a process-centred view tend to assess it in terms of thought-processes such as problem-solving, and researchers who emphasise the role of the environment focus on circumstances in which creativity arises. Equally, the participants in the graphic design survey defined creativity in the context of their own practice as either an educationalist or industry practitioner. This suggests that parameters are important to defining creativity in a given context. However, the consensus amongst researchers increasingly argues for creativity to be considered as multi-faceted with the creative individual reliant upon multiple components. These include personality factors, cognitive ability and style, motivation and knowledge, and the environment (both as a source of stimulation and evaluation). The interaction between components and the environment necessary for creativity in different domains to take place is complex. Adrian Furnham, Mark Batey, Katen Anand, James Mansfield (2008, pp. 1060-1069) assert therefore that to examine only one facet or cognitive ability in isolation of the others is potentially misleading. This is an important observation if future research into creativity in graphic design is to be considered.

Creativity can be defined in a physical sense, in that to ‘create’ something is to make something, an important consideration in art and design but not exclusively so. For example, it could include creating a poem, a concerto, a building, the World Wide Web or even the international space station. Creativity can also be considered in terms of the creation of a new concept, where creativity is seen in the generation of new ideas. However as discussed earlier, White (1992, p. 88) argues that these new

ideas have to be appropriate to the context in which they are generated in order to create meaning. This point is significant in defining creativity in the context of graphic design and will be explored later in the chapter and in subsequent chapters. According to White (1992, p. 88) being creative in the generation of ideas is equivalent to being imaginative and is also not exclusive to the arts in that this form of creativity can take place within theoretical activities as well as in practical day-to-day problem solving. This cognitive definition of creativity looks exclusively at the production of ideas without the need to physically make something for example, when brainstorming an idea or when engaged in problem solving without the requirement for a physical outcome. Both the physical and cognitive definitions are connected in that they are both concerned with the idea of bringing something new into existence that did not exist before.

White (1992, p. 88) goes on to assert that in both definitions the word creativity carries with it a positive value judgement and when used in certain contexts can be thought of as the equivalent of the word 'good'. The creator in both cases would be seen to have created something of merit or value. Sometimes this value judgement may be even closer to both definitions in that an artist or a work may be judged to be more creative than another because of the quality of the making involved. For example, in terms of making, a graphic poster may be considered aesthetically pleasing due to the successful manipulation of complex elements making a unified whole. Equally, in terms of the creation of new ideas, originality, in the sense of breaking with tradition, has come to be seen as an important element within artistic creativity both within the arts and in design.

Kaufman and Sternberg (2010 p. xiii) argue that most contemporary definitions of creativity are comprised of three core components.

> **Creativity must represent something new, novel or original.**
> **Creative ideas are of high quality, merit or value.**
> **Creative ideas must be appropriate to the task.**

We create something when we discuss and express an idea, artefact or form of behaviour that is new to us. As observed earlier by Boden (1990, p. 2), 'new to us' is significant because for an individual to discover something that has already been revealed by others is still a creative achievement. Like Boden (1990, p. 2), Kneller

(1965, p. 4) and Haynes (2014, p. 93) also assert that creativity occurs in the main from making connections between previously unconnected things or the rearrangement of existing things. This rearrangement reveals unexpected relationships between things that were perhaps not recognised before and creates something new. This point will be discussed further in Chapter Four, p. 161 in relation to creativity within graphic design. However, something can be creative without being entirely new and Kneller (1965, p. 6) argues that even in eminent creations something will probably have influenced it in terms of a prior source or form. Artists and designers today freely attribute their influences.

Novelty or newness can attract hostility from contemporaries. Kneller (1965, p. 5) argues that there is always a struggle between the creator and culture and that by definition every creator has to create the standards by which either they or their work is appreciated. For example, a music critic may be unable to assess a composition such as John Cage's *4'33"* (1952) where traditional approaches to music have been abandoned in order to create something new because he does not have the tools or standards from which to do so. Kneller (1965, p. 5) asserts that assessing a work using standards that are alien to it is only to judge one system of values by another. Referring to someone or something as creative is clearly a value judgement and Haynes (2014, p. 93) suggests that judgements are always culturally specific. Therefore, essential to defining an individual or object as creative relies on its recognition by a culture with established rules of evaluation and a group of experts or critics able to validate such innovative activity within a particular context.

The term creativity itself is difficult to pin down because it has a range of meanings and interpretations. For example, the term creative is applied both informally in terms of everyday creativity and also formally in terms of the professional creativity that is considered to be a key component of some professions, particularly in art and design. Scholars, including Csikszentmihalyi (1996, p. 27) and Stein (1953, pp. 36, 311-322), discuss categories of creativity and within the research community these are commonly referred to as small c creativity (everyday) and big C Creativity (eminent). Small c creativity represents the creativity of everyday life and according to Ruth Richards (2007, pp. 25-53) equates to the experiences and expressions of creativity accessible to most of us, for example, the way a home cook might use the

ingredients for a recipe in a novel way which is later praised by friends or family. By contrast, big C Creativity refers to eminent or high-quality examples of creative expression for example, Michelangelo's *Sistine Chapel* ceiling (1508-1512). Categories of creativity can lack nuance for example, a non-eminent artist who makes a living selling paintings and perhaps teaches art part-time to provide additional income as opposed to someone who dabbles with watercolours at the weekend for personal pleasure. Both represent differing qualitative levels of creativity however neither necessarily qualify as big C Creativity.

Newness, originality, and novelty alone do not make an object, activity, or idea creative. Relevance or appropriateness is also a factor. Creativity must work in the context in which it is applied. This is particularly the case in graphic design. For example, creating a tetra pack to hold milk instead of a glass bottle is only creative if the objectives are to create a piece of packaging that can be easily recycled, improve the ability to stack it on a shelf in store, and that it won't break easily when being handled or transported. Relevance or appropriateness is critical because the creative activity needs quality as well as originality. In order to have lasting impact creativity must be perceived as valuable by others.

The theories and definitions of creativity discussed suggest that a creative output begins with a thought, an idea, or a moment of inspiration and that in order to realise a creative output the individual engages in a process of discrete steps or stages that may or may not be linear in nature. Throughout the twentieth century there have been a variety of attempts to model this process within the literature. These models are structures that prioritise an aspect or aspects of the process of creativity providing a lens through which to consider a particular view. The following section considers the creative process involved in generating a creative output and the activity known in graphic design as creative ideation.

Creative Ideation

Creative ideation is the creative process based on subjective experience, of generating, developing, and communicating new ideas in either a visual, physical, or abstract form. It is an essential part of the design process both in education and also in practice. Like creativity the creative process itself is complex. Haynes, (2014, p.

95) argues it can be understood as a process involving change, development, and evolution in the organisation of both the individual's personality and in the wider context of society. The creative process has been modelled extensively in order to define creative ideation and these models are actively used today by a variety of people and disciplines and in a variety of contexts. However, only the model that demonstrates the creative process in the context of graphic design is considered here.

Whilst it is useful to discuss models in terms of discrete phases, J. E. Eindhoven and W. E. Vinacke (1952, pp. 165-179) and Gestalt philosophers such as Max Wertheimer (1945, pp. 27-32) assert that the process of creative ideation does not lend itself to the segmentation implied by the steps presented within a model. It could be argued therefore that just as it is not possible to template creativity due to its qualities already discussed, a single model cannot be expected to provide a generic explanation of creative ideation. Educationalists, in particular those in higher education in art and design, recognise this issue and understand through experience in teaching students that whilst a model may be useful in guiding efforts and activities it should not be applied rigidly. Models are not intended for rote learning and in a given situation it might be useful to deviate substantially from a given model. However, this deviation does not render the original model useless. Models can be useful in directing the flow of an activity as long as the steps are not adhered to dogmatically and there is flexibility about when one step ends and the next begins.

A major problem with some creativity models is that they begin with an observation of a *'need'* or 'problem', however as this is not a prerequisite of creativity this is a common failing of some creative ideation models. Models that feature a 'problem need' at the start of the process overlook the creative triggers supplied by inspiration, imagination, or surprise. For example, the product designer who sees a piece of driftwood on a beach and is inspired by its shape and texture to make a piece of furniture from it is not driven by a need or addressing a problem specifically. However, creative ideation models when framed in terms of problem solving, use the term 'problem*'* broadly to include any task that an individual seeks to accomplish. For example, an artist seeking to express their feelings is equally considered to be engaged in problem solving (Todd Lubart, 2001, p. 297).

The Co-Evolution Model of Creative Ideation

The contemporary model that most closely resembles the process of creative ideation in graphic design is described by Kees Dorst and Nigel Cross (2001, pp. 425-437) and Shaughnessy (2010, p. 33). They argue that creative design is not the result of defining a problem and then developing a satisfactory solution. It is a result of developing and refining at the same time both the formulation of a problem and ideas for a solution and, as observed by Dorst and Cross (2001, pp. 425-437), can be modelled clearly using the Mary Lou Maher model of co-evolution (1996). This process is iterative at each of the key stages throughout the design process – 'analysis', 'synthesis', and 'evaluation'. Dorst and Cross (2001, pp. 425-437) argue that the creative event in design is not a creative leap from problem to solution but the building of a 'bridge' between the problem space and the solution space by the identification of a key concept. They argue that creative design involves an exploratory period where both the problem and solution spaces are evolving. These spaces are therefore unstable until temporarily fixed by a bridge that emerges to identify a problem-solution pairing. Schön (1983, pp 12-15) argues that a creative event occurs as the moment of insight at which a problem-solution pair is 'framed.' Dorst and Cross (2001, pp. 425-437) confirm that studies of experienced and eminent designers suggest that this ability to frame (or apply parameters as discussed earlier) is critical in high-level performance in creative design. Designers are taught a strategy for framing problems that relies on a structuring of information relating to the problem. This structuring seeks out the key pieces of information that are deemed pertinent to the brief and as argued by Nigel Cross (2011, p.121) is a process that is refined with experience. The strategy involves asking a standard set of questions such as target audience, unique selling point etc. and designers have a set of expectations regarding the answers to these questions. Dorst and Cross (2001, pp. 425-437) refer to these expectations as a 'default' project with which they compare the problem brief. The information is used to build a general picture and to look for 'surprises' – something not immediately obvious from the client brief. This in turn leads to an overview of the project and an understanding of the priorities of the key stakeholders and forms a collection of interesting points which can be referred back to. Both Dorst and Cross (2001, pp. 425-437) and Schön (1983, pp 12-15) argue that the creative aspect of design can be described in terms of 'default' and 'surprise' problem/solution spaces. Surprise is critical to Schön's notion of creative design in

that it provides the impetus that leads to framing and reframing thus keeping the designer from routine behaviour. The 'surprising' part of a problem or solution drives originality and therefore creativity in a design project.

This contemporary model of the process of creative ideation is what Abraham A. Maslow (1943, pp. 370-396) referred to as complex 'higher order thinking' or what we today might refer to as critical thinking and requires that individuals engage in intricate activities over an extended period of time. Significantly in terms of graphic design, Maslow (1976, p. 57) also distinguished between 'primary creativeness' which he defined as a state of inspiration and 'secondary creativeness' which he argued had different qualities and which he defined as the analysis (critical thinking) and execution (making) of the creation. Analysis and therefore critical thinking are also considered to be creative in this context. The majority of participants in the graphic design survey identified both the activities of making and critical thinking as intrinsic to creativity in graphic design. Therefore, understanding what it means to be critical is discussed in the next section.

Critical Thinking

As an activity critical thinking is relevant in many disciplines however, it is imperative in graphic design. Whilst graphic designers are invariably referred to as creative visual communicators it is in their ability as critical thinkers that the true role and value of creativity in graphic design can be seen. Graphic designers are meant to be critical thinkers not just visual interpreters of other people's messages. It is an inherent part of the design process and when done well leads to creative thinking. However, there are problems in the way critical thinking is addressed in graphic design programmes in higher education. This is due in part to a lack of understanding regarding what it is and its significance in terms of graphic design as practice.

Jennifer Moon (2008, p. 21) argues that in higher education there is as much confusion regarding what constitutes critical thinking as there is regarding definitions of creativity. Significantly, like creativity, definitions of critical thinking are influenced by the discipline evaluating them. Therefore, critical thinking in the humanities will be understood differently in terms of the activities involved to those

within the arts and specifically graphic design. In pedagogy it is often assumed that terms like critical thinking, critical analysis, critical reflection etc. have a set, defined meaning but this is not the case. It is therefore easy to see why students might have difficulty when being asked to behave critically in their project work.

The literature invariably discusses critical thinking in an educational context and there are numerous ways in which the topic is approached. Stella Cottrell (2011, p. viii) defines critical thinking in terms of the skills involved and argues that critical thinking involves working out whether or not we believe what we see or hear, taking steps to establish if something is true and then arguing our own case if someone does not believe us. By contrast, Alec Fisher (2001, p. 13) discusses critical thinking in terms of the quality of reasoning involved and argues that critical thinking is a kind of evaluative thinking that involves criticism and creative thinking. It is particularly concerned with the quality of the reasoning or argument presented in support of a belief or course of action. The skills definition, often referred to in education as 'study skills', is the one most students in higher education engage in because it is designed to be easy to understand. However, many educationalists consider this definition too simplistic. Sharon Bailin, Roland Case, Jerrold R.Coombs, Leroi B. Daniels (1999a, pp. 269-283) argue that much of the theoretical and pedagogical work on critical thinking is misdirected because it is based on unsound perceptions with critical thinking conceptualised in terms of skills, processes, procedures and practice. Whilst there are identifiable skills and processes that may be part of critical thinking it does not necessarily follow that teaching them separately from a given discipline is the best approach. In graphic design for example, explicit consideration of critical thinking and learning is often delegated to complimentary disciplines such as Cultural Studies where critical thinking is addressed in the context of reading and written skills.

Many educationalists adopt a less structured approach to critical thinking by facilitating its development amongst students rather than treating it as a process to be followed and learned. An advocate of this approach is Jens Kaasboll (1998, pp. 101-117) who emphasises the educational conditions where critical thinking is developed. The approach includes using project-based activities where critical thinking and learning can be developed in the context of the discipline. The teaching

staff can facilitate the development of critical thinking by modelling it in the way they teach. This is generally the approach taken within graphic design programmes where students are presented with client briefs, live or otherwise. However, it invariably subscribes to simplistic definitions of critical thinking linked to learning objectives and assessment practices than to deep critical enquiry. This point will be discussed further in Chapter Five, pp. 191 - 196.

Ronald Barnett (1997, p. 103) argues that a more comprehensive understanding of critical thinking as a key activity in higher education has been lost due to the emphasis now being placed on the activity of reflection. Whilst he considers this understandable, he suggests it is at the service of an 'instrumental agenda' linked to the development of a useful workforce rather than about self-development. This will be discussed further in Chapter Five, p. 195. Barnett (1997, p. 103) suggests that there is a hierarchy of criticality with the 'discipline-specific critical thinking skills' geared towards problem-solving at the lower end of the scale, rising through levels of reflexivity to the reframing of traditions, through to the highest level of 'transformatory critique' where the self is reconfigured through 'critique in action'. The lower forms of critical thinking go no further than local thinking within the discipline rather than addressing wider social concerns. Whilst the discipline of graphic design is evolving from a vocational to an intellectually based discipline it continues to engage with critical thinking at the lower end of the scale with curriculum content addressing discipline specific problem-solving activities. If graphic design today is required to be more than a visual interpreter of other people's messages, then critical thinking and its relationship with creative thinking needs to be taken more seriously in higher education. As argued by Barnett (1997, p103) higher education should be about the development of the critical being, with critical thinking considered a 'life skill'. Criticality he suggests is a disposition – a way of seeing, feeling and working in and alongside society. This is an important point that will be discussed further and in more detail in later chapters.

Although Moon (2008, p. 126) confirms the difficulty in providing a definitive description of critical thinking she does provide a definitional statement regarding its attributes. She suggests critical thinking covers both the mental activities of thinking and the various representations of that thinking that include an action such as speech

or writing etc. Terms such as 'critical appraisal', 'evaluation', 'reflection' and 'understanding' should be considered as elements of critical thinking when the emphasis is on certain types of mental activity. Critical thinking provides the capacity to work with complex ideas, providing evidence to justify a given judgement. The evidence (judgement) will be considered within an appropriate context. It is a form of learning because new knowledge in the form of judgement is gained in the process. The term judgement may reflect a judgement of one thing against another as in decision making or judgement of the merit of something in relation to a purpose or set of criteria previously agreed. Effective judgement implies effective thinking, reasoning or argument and in the quality of the output of the thinking such as writing or speaking. An important characteristic of deep critical thinking is that the individual thinker takes a critical stance towards the actual process of critical thinking and how it is represented in terms of output. Critical thinking relies on an understanding of knowledge constructed within a given context, something that is not possible if knowledge is only viewed in terms of the accumulation of facts. This will be discussed further in Chapter Five, p. 177 in terms of graphic design education. Deep critical thinking can be equated with good-quality thinking involving analytical thinking rather than surface description of issues. The relationship between depth of thinking and the development of knowledge indicates that critical thinking develops as a capacity and that this development therefore needs to be considered in education. Precision, good organisation, effective reasoning and reflection are some of the skills associated with critical thinking however it is more than a skillset. Standards in critical thinking are equally important and these can relate to the quality of thinking, output or conclusion to the thinking. The personality of the individual affects both critical thinking and its outputs. For example, both emotion and cognitive processing are recognised as important to critical thinking. Intellectual curiosity and interest are equally relevant as is motivation and these are qualities that will be identified in later chapters as integral to creativity. Finally, having courage in the assertion of ideas together with a willingness to deviate from those ideas if necessary are also qualities displayed by the effective critical thinker. Significantly, Moon (2008, p.127) suggests that critical thinking and its manifestation is a culturally influenced process and a Western way of processing ideas. This is an important point to observe in educational terms as

students from other cultures, either in the UK or internationally, may experience difficulties in understanding it because they think or work differently.

The aim of this chapter was to establish a definition of creativity that might be used within the thesis in the context of graphic design. In considering the characteristics of creativity and the process by which ideas are generated it identified the significance of critical thinking and its relationship with creative ideation. Critical thinking was confirmed as an integral and active part of the process of being creative. Creative ideation therefore involves both imagination (creative) and analytical skills (critical thinking) and these are complimentary rather than opposing. The importance of critical thinking in terms of creative ideation is significant when discussing the role of creativity in graphic design. Creativity is more than developing a skillset, it is all encompassing and united by critical thinking. This is why many argue that creativity is a human quality that cannot be replicated by a machine such as the Apple Macintosh computer used primarily as a design tool within design practice. To use the tool effectively requires the designer to be highly skilled in its software however, the tool is at the command of the designer who through the use of creative and critical skills will direct its activities and add value. For example, using a musical analogy, whilst an orchestra is made up of a number of highly skilled individual musicians it is through the interpretation and direction of the conductor that a version of a musical piece is deemed more creative than perhaps an accurate literal interpretation of the original score.

Therefore, a definition of creativity in the context of graphic design must include reference to critical thinking. The definition of creativity proposed for use within the thesis in terms of graphic design is:

> **Creativity is considered to involve imagination and a process by which ideas are generated, connected and transformed in order to interpret, provide meaning and create value.**

Conclusion

Throughout the history of Western thought different views regarding creativity have been held as the understanding of creativity has evolved. These have shaped contemporary views and definitions regarding creativity which are more expansive

and inclusive than in the past. Historically attitudes towards creativity were elitist with creativity being considered the domain of a few special individuals of genius engaged in high level (big C) artistic creativity. However, contemporary views consider creativity in terms of process not outcomes and as an activity that everyone can engage in (small c creativity). Cultural misunderstanding and misuse of the term has led to creativity being considered behavioural. Big C 'Art' has become 'artwork' referring to anything anyone 'creates' such as hand-made accessories for home interior projects. Everyday hobbies such as sewing, or gardening, are equally described as creative activities and there is now confusion in defining the act of creating as opposed to making. This confusion can be observed in both society and also education. It is problematic in graphic design education because it influences what and how students of graphic design are taught. Creativity in the context of graphic design should be defined in terms of its relationship with critical thinking, a complementary activity and one which adds value to the process of creative ideation.

Chapter 3 –The development of Graphic Design as a Creative discipline

Introduction

Many of the issues facing graphic design today can be attributed to a lack of understanding regarding what design practice is or can be. This is due to preconceptions of what design practice has been in the past (Paul Atkinson, 2013, p. 397; Victor Margolin, 2013 p. 403). The consensus amongst practitioners, including those within the graphic design survey, is that graphic design emerged out of craft that was distinguished from fine art by its focus on process and function (making) rather than intellectual, creative skills. In order to consider graphic design in this context it is necessary to discuss what is meant by the term art, craft and design as definitions and practice have changed with time. This chapter therefore considers how graphic design has developed as a discipline within the arts and provides the historical context for this thesis. It is not intended as a history of graphic design but as a discussion regarding how the discipline sits within the arts generally and why graphic design has become associated with making rather than creating. Understanding this will be important to further discussions regarding the role and value of creativity in graphic design in later chapters.

Chapter Two identified that creativity in graphic design involves two complementary skills; the physical skills involved in making and the cognitive skills enabling critical thinking. However, historically these have come to be viewed as opposites in terms of practice. Before the eighteenth century a broad, utilitarian concept of art was understood within Western European culture (Larry Shiner, 2001 p. 18). The concept of fine art as distinct from craft did not exist, only the arts existed, and the artisan-artist was viewed as a maker rather than a creator (see Chapter Two, p. 73). However, this older system of art/craft, where art and life were considered as integral to one another, was replaced by a new system of fine art ‘versus’ craft and design. The notion of art ‘versus’ craft and ultimately design has significant implications in terms of how graphic design is understood and evaluated today, particularly in terms of creativity and its role in terms of practice. As a belief system and a measure of quality, value and expectation, the contemporary system of art is already well established before the discipline of graphic design emerges. Graphic design today is

invariably evaluated in these terms. This limits perceptions and expectations regarding what graphic design can be in the future because graphic design is not defined as an intellectual and creative practice.

The Traditions of Craft

Graphic design practice developed from the traditions of craft that can be traced back to antiquity however the terms we use today for craft, art, and design have evolved and their definitions or categories have become confused with time. Craft today means something different to design although historically craft encompassed design as part of practice. This section considers the history of craft and discusses how the discrete practices of craft, art and design have developed from what was originally a single inclusive practice. It also considers the distinction that was made in terms of the skills associated with practice, particularly those of the physical skills of making and the intellectual skills employed in thinking and their associations with creative practice. Significantly, it considers the relationship between craft and society, the values placed upon craft, and how the role of craft was influenced by the culture of the day. This will be important in identifying the role of graphic design in twenty first century society and why creative and intellectual skills are important to design practice.

The Mimetic Arts

Shiner (2001, pp. 19-23) confirms that the ancient Greeks did not have a word for what today would be called fine art. The word we translate as art was 'techne', which like the Roman word 'ars*'*, included many activities that would today be referred to as craft. 'Techne' included diverse activities such as carpentry, poetry, sculpture, and horse breaking. It did not describe a class of objects but the human ability to make (not create) or perform. The ancient Greek and Roman (7th century BCE – 500 CE) view of the artisan-artist therefore was much closer to contemporary ideas of the craftsperson. However, it did not include the emphasis placed today on imagination (creativity), originality and autonomy and ancient practice was always

discussed as arts of imitation or 'mimesis'[8]. Imagination and innovation were appreciated as part of the craftsmanship of utilitarian items but not in the way they are considered today. The 'mimetic' arts were grouped due to the procedures involved in their making rather than as a separate fine art category in the contemporary sense and as such painting and tragedy were considered in the same way as other arts such as shoemaking or medicine (John Boardman, 1996 p.16). Discussing the contexts in which classical artefacts were made and displayed Robin Barber (1990, p. 376) and Nigel Spivey (1996, p.140) confirm that most of the artefacts that are today considered as Greek or Roman fine art, for example free-standing statues, speeches, and house decoration, were not made to be admired as fine art but to serve various religious, political, and social purposes. Boardman (1996, p.16) explains that the attitude of the Greeks toward the visual arts before the Hellenistic period was that all art had a function in society and all artists supplied commodities in the same way as shoemakers or shipbuilders. There was no art market or collectors and the concept of 'Art for Art's sake' (this will be expanded upon later in the chapter) was virtually unknown.

The Liberal and Mechanical Arts

However, discussing Plato's understanding of techne and the relationship between art and wisdom/knowledge, David Roochnik (1996, p. 271) notes that not all activities were considered of equal status. He argues that whilst there was respect for painters and sculptors amongst the broader population, they were still viewed in aristocratic circles as manual workers. There was prejudice against all manual production or performance for payment no matter how intelligent, skilled, or inspired it might be. Shiner (2001, p. 22) argues it was only in the late Hellenistic and Roman period, when the arts were divided into the 'liberal' and 'vulgar' (or servile), that the arts in the ancient world significantly resembled contemporary ideas. The liberal arts were intellectual pursuits that were considered appropriate to those of high birth and educated such as the verbal arts of grammar, rhetoric, and dialectics and the mathematical arts of arithmetic, geometry, astronomy, and music. The vulgar arts

[8] 'Mimesis' is the imitative representation or copying of the real world in art and literature.

were those that involved either physical labour (making) and/or payment.

The distinction between liberal and vulgar activities within the arts, and therefore between intellectual (critical thinking) and physical (making) activities, continued into Medieval times (476 CE -1453 CE). Shiner (2001, p. 28) suggests that no division was made between crafts and fine art and lists of the arts from the fifth to the thirteenth century included for example, painting, sculpture, and architecture along with cooking, navigation, and horsemanship.

According to Elspeth Whitney (1990, p. 83), during the late twelfth century, the eminent scholar and theologian Hugh of St. Victor put forward an influential argument that the derogatory term 'vulgar' or 'servile' should be replaced with the term 'mechanical' (manual) arts and suggested that as there were seven liberal arts there should also be seven mechanical arts. This higher status of the mechanical arts was challenged by writers such as the theologian and philosopher Thomas Aquinas who accepted Aristotle's separation of the theoretical arts from the manual/applied arts along with his view that utility and paid work were degrading. Aquinas argued that "*those arts that are ordered to some utility through performing an action are called mechanical, or servile"* (Whitney, 1990 p. 140). Therefore, as early as the thirteenth century, when all arts and crafts held a place of dignity, this position was already being challenged by a resurgence of the ancient depreciation of utility and making as 'vulgar' and 'servile'. However, Whitney (1990, p. 147) confirms that by the end of the thirteenth century the mechanical arts were regarded as a highly valued category of knowledge. This represented a substantial and significant change from the classical evaluation of craft as simply the act of physical making.

It was usual for medieval 'artificers', the term used for those working in the mechanical arts, to work collectively as part of a craft workshop or guild. As in antiquity, they were often perceived as having low status due to their association with manual labour. By contrast, those working within the liberal arts were known as 'artista'. Shiner (2001, p. 31) argues that as most of the mechanical arts required intelligent planning, imaginative conception, sound judgement and manual dexterity it would be wrong to assume that craftsmen simply followed a pattern book or workshop routine. However, Umberto Eco (1986, p. 92), writing on art and beauty in medieval culture, explains that the medieval artificer was still considered a maker

not a creator and this view remained the norm during the medieval period. This model of the mechanical arts, and therefore its associated status and skills, remains current today and is used by many when discussing the applied arts, particularly graphic design. Graphic design practitioners themselves often describe their practice in this context and do not make a distinction between the act of making and creating. Others use the terms interchangeably for example, in the graphic design survey when defining creativity Participant 20, an Academic/Industry Practitioner stated "*I believe creativity is the ability to make something that wasn't there previously. This doesn't have to be an original expression, just one that is manifested by someone or a group and has a benefit to the final outcome".*

Beauty, Form, Content and Function

Medieval thinking did not separate appearance from content and function. This is quite different from contemporary views regarding the aesthetic. The arts responded to form, content, and function together with no one aspect being deemed more important than another. Images in Western European stained-glass windows for example, were included for their didactic function rather than purely for pleasure. Shiner (2001, p. 33) argues this followed the traditions from antiquity where the arts were completely embedded within social, political, religious, and practical contexts. For example, the memorising and reciting of the *Aeneid*[9] was used as a vehicle for teaching correct grammar and fine style, as a means of instilling civic virtue through instruction, or to show membership of the 'educated classes.' It was not considered as a work of imaginative (creative) fine art in the sense it would be considered today.

Beauty as a concept was discussed in terms of the beauty of God and nature, not the beauty of the products of human art. As in antiquity, the term beauty had a much wider meaning than it does today. For example, sculpture or poetry were admired in the same way as a well-crafted political speech due to its combination of morality and appropriateness to the situation (Shiner, 2001 p. 33). The philosopher Martha Nussbaum (1996, V.1, p.175) states that *"Poetry, visual art and music were all taken*

[9] The *Aeneid* is a Latin epic poem written by Virgil between 29 and 19 BCE that tells the legendary story of Aeneas, a Trojan who travelled to Italy where he became the ancestor of the Romans.

to have an ethical role, in virtue of their form as well as in virtue of their content". Beauty in the Middle Ages therefore, meant embracing moral value and utility as well as having a pleasing appearance. As such the harmony or proportion within an object did not make it beautiful, it was the right proportion in relation to its function that achieved this. The discussion regarding the relationship between form and function continued within the arts and would significantly influence early twentieth century Modernism and the development of graphic design as a discipline.

During the Renaissance period (1350 CE – 1600 CE) artisan-artists continued the system of arts developed during the Middle Ages observing the liberal and mechanical arts categorisation. Discussing the complex relations between the arts, culture and society Martin Kemp (1997, p. viii) argues that the emphasis given to 'fine art' masterpieces today does not correspond to the systems of value employed at this time. For example, Evelyn Welch (1997, p. 79), Peter Burke (1997, p. 67) and Bruce Cole (1983, p. 13) confirm that Renaissance painters generally worked as part of a team within a craft workshop or guild and it was their combined efforts when responding to commissions, without concern for individual creativity, which remained the norm during this time. This craft workshop model continued to be typical through to the seventeenth century and painters generally continued to work on decorative commissions alongside for example, wood and stone carvers, glassmakers, and ceramicists. Claire Robertson (1992, p. 212) asserts that status and wealth amongst artisan-artists was dictated by the demands of the day and throughout Italy and Northern Europe works from within the decorative arts, for example miniatures or majolica ware, were often valued more highly in monetary terms than paintings or sculptures. Richard Goldthwaite (1980, p. 42) confirms there was no perceived hierarchy of status or prestige between the work of renowned ceramicists or cabinetmakers and that of painters and sculptors at that time by either patrons of the arts or the public.

Creativity and Innovation

Change and growth in Medieval society was slow due to stable social and economic conditions. Heskett (1992, p.118) suggests that in terms of new artefacts, craftsmen were not overly concerned with creativity and innovation but with handing on and

adapting the skills and forms developed by earlier generations. However, with the growth of competition in Western Europe due to the more dynamic economic conditions of the fifteenth century, creativity and innovation became vital to success and the craft tradition of maintaining established standards gradually came under threat. Equally, Shiner (2001, p. 46) argues that the spread of knowledge of perspective and the revival of ancient modelling at this time led to the view that creation, particularly in painting and sculpture, now required not only an apprenticeship via the craft workshops but also some knowledge of geometry, anatomy, and ancient mythology (critical, intellectual pursuits). Leonardo da Vinci, for example, projected an image of the artist as a 'craftsman-scientist'. This knowledge was considered vital to 'invention', a term derived from antiquity which did not mean 'creation' in a contemporary sense, but the discovery, selection, and arrangement of content defined in Chapter Two as making rather than creating. This distinction is significant when considering what constitutes creativity in graphic design as designers often discuss their practice in terms of selecting, rearranging, and editing existing material and ideas. For example, Participant 23 from the graphic design survey, an Industry Practitioner, stated "*graphic design relies on the reapplication of existing ideas and inspirations [trends and conventions]. In the last 50 years graphic design has been explored so thoroughly that many visual communication principles have seen exposure somewhere, for some reason, so are likely to inspire re-application".* Adapting form developed by earlier generations of designers is considered both acceptable and the norm reinforcing the perception of graphic design practice as making not creating.

By the late sixteenth century this scientific sense of invention was gradually supplemented by qualities more usually associated with the poet such as 'imagination', 'inspiration', and 'natural talent'. However, although these concepts appear contemporary, they are different to today's understanding of 'creative imagination' because they were inseparable from skill and imitation of nature for a particular social purpose. These imitations were constrained by the idea of 'decorum' and 'appropriateness' that had continued from medieval and ancient beliefs (Shiner, 2001, p.46).

Graphic Design as Craft

It was during the fifteenth century that graphic design (although not referred to as this) emerged from the craft tradition. Following the workshop model, it developed from the type-cutting and book printing established in the UK and Europe due to the introduction of moveable type (1452) by Johann Gutenberg (Katherine McCoy, 1990 p. 5; Bruce Brown, 2012 p. 159). Movable type made it possible to reproduce books in mass quantities and for the first time, all society had access to written knowledge. Western Europe from the fifteenth century onwards became a mass-media society and the printing press made visual images and content widely available. Artists, including Dürer and Rembrandt, utilised the printed image by developing detailed satirical narratives that could be understood by everyone (Jonathan Jones, 2006).

Bookmaking, typesetting, and type design were an integrated craft based in publishing houses. Book design and typography was practiced as the visual presentation of verbal language (McCoy, 1990, p. 5). However, it was evaluated in terms of clarity and legibility rather than any form of visual expression or creativity and left the words themselves to express the content of the publication. The typography was not involved in the message and was not interpretive in its presentation. Publications became elegant and refined and this classical approach has become the standard text format that continues to the present day. However, McCoy (1990, p. 5) explains that no matter how beautiful the book, the functionality associated with it relegated the activity of book design to the status of craft rather than fine art. In early books, illustrations were used sparingly due to the technical difficulty in reproducing them and they were generally literal representations of ideas discussed within the text. Interpretive symbolic imagery was left to the domain of painting and the liberal (fine) arts and it was not until the early twentieth century that meaning became part of the expression of visual typographic form.

Phillip B. Meggs (1998, p. 127) confirms that it was the printer and technician (compositor) who produced all aspects of the craft from typeface design and page layout to the printing of books and broadsheets. The design was invariably dictated by the limitations of the printing method employed rather than aesthetic consideration alone. Working within these production constraints was instrumental in establishing the view that the products of design for print were the result of

making within limitations rather than the result of creativity, a view still held by many today.

The seventeenth century was a time of transition however Shiner (2001, p. 67) argues that 'art' still had the older and more inclusive meaning of 'an art' with the arts still considered in terms of purpose and utility. The concept of the liberal versus mechanical arts was still widely used. Painting and sculpture however, had begun to achieve a liberal arts status in Florence with the granting of liberal status by the Pope to the Roman Academy of St Luke in 1600. Equally, in 1563 the painter, architect, writer, and historian Giorgio Vasari started an 'Academy of Design' with the intention of giving members exemption from guild regulations, emphasising their claim to liberal arts status. Discussing the social position of the artist in baroque Europe and the growing interest in art, Felix Da Costa (1967, [1696], p. 52) and Iain Pears (1988, p. 22) observe that in France paintings enjoyed an elevated prestige with the development of the French Academy in 1648 followed in 1677 with a liberal ranking of the status of painters in Spain. Elsewhere in Europe however, (Portugal, England, and the Dutch Republic) painting had to fight for liberal arts status and this fight continued until the eighteenth century.

Categorising Creative Practices

Paul O. Kristeller (1990, [1950], p. 163) argues that the contemporary system of craft, art, and design as it is now defined and evaluated has been consciously made. It is an invention from eighteenth century Western Europe and the Age of Enlightenment. J. H. Plumb (1972, p. 30) observes that before the eighteenth century there were no public libraries, concerts, or museums. However, by the end of the eighteenth century all these cultural institutions were in place across Western Europe along with both a market and public for the fine arts and the aesthetic. It was the convergence of these intellectual, social, and institutional changes that gave rise to the contemporary system of fine art. This section considers the fine arts and discusses the key influences that shaped their development as a discrete discipline separate from craft and observes that the fine arts at this time were no longer viewed in terms of their function within society although today this relationship is again being questioned by some within the fine arts community. It also considers the

development of design as a discrete discipline separate from craft that emerged during the nineteenth century and the division of labour associated with the Industrial Revolution.

The Fine Arts

Shiner (2001, pp. 81-82) argues that the discipline of fine art as it is understood today and the criterion by which it was defined, namely refined pleasure and informed judgement, was neither an intellectual construct nor an expression of an existing social division. It was a conscious intention to develop a new distinction within the arts that was both social and cultural. Kristeller (1990, p. 210) notes that it is no accident that when the book *Les beaux arts reduit a un meme principe* by Charles Batteux (1989, [1746]) appeared in English paraphrase, the term 'beaux-arts' was translated as 'polite arts', with its strong social class connotations. This new discipline of polite or fine arts would become important in the development of a new kind of social refinement and cultural distinction in Western European society.

Most of today's fine art institutions were established at this time and it was during this period that secular concerts, literary criticism and the art museum adopted their contemporary functions and meanings. Shiner (2001, p. 88) argues these institutions embodied the new opposition being discussed between the fine arts and crafts by providing places where music, poetry and paintings could be experienced and discussed separately from their traditional social functions. It was this separateness, rather than the intellectual debate of the time, which led to the establishment of a distinct category of fine art. Writing on the cultural history associated with the Enlightenment, Krzysztof Pomian (1987, p. 158) and Dena Goodman (1994, p. 303) confirm that the public art museum emerged at this time across Western Europe. This was due to the opening of parts of Royal collections in London, Paris, Munich, Vienna and Rome. Although they had limited public access the establishment of these collections is important to the idea of 'art' as a separate entity no longer viewed in terms of its functional context. Another key indicator of its separateness was the development of the upper-class educational experience known in England as the Continental Grand Tour and in France and Germany as the Italian Journey. Artefacts such as tableware, religious paintings and sculpture were now viewed in

display cases away from their original functional contexts. Considering the relationship between the arts and culture Nathalie Heinich (1993, p. 152) states that by the mid eighteenth century the contemporary position of 'artisan' versus 'artist' was clearly visible and the dictionaries and encyclopaedias of the day were already making the distinction by defining the 'artisan' and 'artist' as opposites. The artisan continued to be described in terms of making items of utility whilst the artist was beginning to receive a more elevated status with practice now considered separate from the utility involved in making.

Writing on the relationship between art and society in France at this time Jean Chatelus (1991, p. 277) notes that many, including the English painter William Hogarth, still worked on a variety of activities beginning their artistic development in the production of functional work. This might include silver engraving, sign painting and art prints etc., gradually working their way up to more complex activities. For example, the large-scale figurative scenes used to decorate the walls of aristocratic houses produced by painters such as Francois Boucher or Jean-Honoré Fragonard. However, changes in domestic tastes affected the figurative parts of house decoration, which became smaller, thus the painter was able to work in his studio. This in turn reduced the contact between the figurative painter and the decorative painters still active in workshops. A practical consideration of the separation, discussed by Pears (1988, p. 23), included the development of commercial paint manufacture which meant that decorative painters no longer required the knowledge and ability to grind pigments (an activity that would have aligned them to a guild or craft workshop). Instead, they focused on providing their service as painters only. An institutional factor which further raised the status of the fine artist was the substantial growth in the founding of academies, which in 1740 amounted to 10 but by 1790 had grown to over a hundred. The most notable, the British Royal Academy (1769), was intended to raise the status of artists and Sir Joshua Reynolds, its first president, encouraged both colleagues and students to pursue *"ideal beauty lest they fall to the level of the mere mechanic"* (Reynolds, 1975, [1770], p. 43). By the end of the eighteenth century the concept of the 'artisan' and 'artist' had been separated both semantically and in terms of their daily practice (Shiner, 2001 p. 103).

Before the eighteenth century the requirements of an artisan-artist combined a number of recognised qualities including both intellectual and manual skills. However, during the eighteenth century these qualities were finally separated. All the 'creative/intellectual' attributes such as inspiration, imagination, autonomy and genius were assigned to the artist whilst all the 'mechanical/making' attributes such as skills, rules, imitation, and service were assigned to the craftsman. For example, the French linguist and philologist Ferdinand Brunot (1966 p. 682) confirms that the dictionary of the Académie Française published in 1762 defined the artist as "*he who works in an art where genius* [creativity] *and hand must concur*". The craftsman however is defined as "*a worker in a mechanical art, a man with a trade*". By the time the graphic designer, or 'commercial artist' as they were referred to then, emerged during the nineteenth century the skills and values associated with the discipline were already defined and established in terms of the making involved in craft rather than as a creative and intellectual activity.

Taste and the Aesthetic

A significant factor in the separation of fine art from craft during the eighteenth century was fine arts' appeal to the finer pleasures of taste rather than to utility. The issue of 'taste' was problematic because it involved not only the issues of universality and innateness it also questioned what special social or mental characteristics were required of fine taste (Shiner, 2001p. 137). Benedetto Croce and R.G. Collingwood (1934, pp. 157-167) explain that until the eighteenth century, taste had been defined as a kind of tacit knowledge. However, during the eighteenth century, theories regarding taste began to separate taste in the fine arts from associations with ordinary sensory pleasures and utility. Throughout the nineteenth century artists, critics, and philosophers all attempted to resolve the issue of taste by redefining it in terms of the contemporary idea of the aesthetic. There are many discussions and texts regarding the aesthetic but for the purpose of this chapter only those that indicated a split in the traditional response to the arts that separated utility from the aesthetic were considered.

There is a significant difference between taste and the aesthetic. Taste has always been considered a social concept concerned with food, dress, and manners as well as

with the beauty and meaning of nature or art. Penny Sparke (1997, p. 17) explains that taste in the eighteenth century was disseminated through the social classes by 'upward emulation'. Each class copied the one above it. Carolyn Korsmeyer (1999, p. 12) notes that historically, literal taste, in terms of the physical senses of taste, smell and touch, were considered too sensual and bodily compared to the sense of vision and hearing. According to Croce and Collingwood (1934, pp. 157-167) three key features of taste became what today would be called the aesthetic. The first was in developing the ordinary pleasure in beauty into what was considered a refined and intellectualised pleasure. The second addressed the idea of unprejudiced judgement and transformed it into an ideal of the Kantian notion of "disinterested contemplation"[10] (Immanuel Kant, 1987, pp. 45, 51-52, 61-62) and the third, the preoccupation with beauty, was replaced by the sublime and the idea of the self-contained work of art as creation[11] (Immanuel Kant, 1987, pp. 225-230, 119-132). Their significance was the idea of a special refined pleasure that separated polite or fine taste from the older idea of taste as preference. By the nineteenth century the term 'art' began to signify an autonomous spiritual domain and the concept of the aesthetic began to replace taste as a measure of quality and success in a work (Shiner, 2001 p. 187). Aligning the aesthetic and the intellectual with the fine arts rather than craft further reinforced the separation between the two consolidating the distinction between creating (fine art), an intellectual activity, and making (craft) that now directs contemporary thought in relation to graphic design.

According to Ronald Paulson (1991-1993, p. 93, p. 3, p. 121) the craftsman-artist Hogarth recognised taste as a matter of politics and power and of who has the authority to judge a work. Whilst as an artist he recognised the refined direction of taste he also recognised its elitism and throughout his career Hogarth remained on

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[10] Kant argues that theories which make taste the application of concepts or rules, of sensual pleasure or utility, all admit to an 'interest' or desire. True 'aesthetic taste' however, is a pure disinterested pleasure in which we only contemplate an object. SOURCE: Kant, I. (1987) *Critique of Pure Reason*. Translated by W. S. Pluhar. Indianapolis: Hackett.

[11] Kant was as interested in the aesthetic response to nature as to fine art but despite attempts to demonstrate that the sublime reveals our moral nature the long-term effect of his work reinforces the separation of art and craft and therefore art and morality. SOURCE: Kant, I. (1987) *Critique of Judgement*. Translated by W. S. Pluhar. Indianapolis: Hackett.

the side of the craftsman arguing that art should be democratised and accessible to all. In the same way that graphic design imagery does today Hogarth's art prints democratised imagery as they did not require an intellectual grounding in the classics in order to be read. F. S. Kleiner (2010, p. 594) argues that the popularity of Hogarth's prints exemplifies both the democratisation of knowledge and culture the Enlightenment fostered and the exploitation of new printing technologies that produced a more affordable and widely disseminated visual culture. They were frequently moral in tone drawing from the satirical traditions of the English broadsheet and other types of popular print. Hogarth's work, paintings and engravings, had a broad appeal and was mass-produced via prints within his lifetime. Artwork at this time became increasingly commercialised and could be seen in coffee houses, taverns, public buildings, and shops selling prints. The refined taste, intellectualisation and elitism associated with fine art, together with the democratisation of visual culture associated with printed ephemera, is still used by many today as an argument against graphic design being considered an intellectual and creative discipline.

The Decorative Arts

Although it was a gradual process, development during the nineteenth century, including the Industrial Revolution and the growth in mechanisation, significantly changed the image and status of the fine artist and the craftsman. The status of the fine artist continued to grow while that of the craftsman declined. Raymond Williams (1976, p. 33) confirms that by the 1830s 'Art' as an abstract term and domain with its own belief system was firmly established.

By the mid nineteenth century the human environment in the UK was increasingly man made. According to Heskett (1992, p. 119) creativity and innovation were becoming important elements in social progress and economic success. The design of objects was now evaluated in terms of decoration rather than function. Standards and criteria for judging good design were derived from earlier times when elaborate form, costly materials and intricate decoration were symbols of wealth as only the wealthiest members of society could afford the work of skilled craftsmen. However, the new mechanical processes were able to replicate not only the fine decoration of

traditional forms and techniques, but also able to simulate the qualities of rare materials making an object look more expensive than it actually was. Mass consumption became a reality and design emerged as a discipline discrete from craft assigning it greater focus and importance (Sparke, 1987 p. 11).

Shiner (2001, p. 206) identifies that the mechanisation associated with the Industrial Revolution gradually eroded the basic characteristics of the traditional craft workshop. The first characteristic saw the workshop as a hierarchy based on inventiveness, knowledge and skill that together formed the 'art' of the craft. Some crafts had an apprenticeship where masters worked alongside their apprentices offering guidance. Graphic designers today have a similar apprenticeship with junior designers working under the guidance of senior designers and creative directors (this will be discussed further in later chapters). The second characteristic was that apprentices learned all aspects of design and production with an individual apprentice often seeing a product through from initial design to completion of the finished object. This is a characteristic of the digital graphic design process today. Thirdly, the majority of the work was done by hand using tools and techniques handed down from one generation to the next. Although no longer exclusively hand-made, graphic designer's today are taught to use the tools and techniques associated with the discipline reflecting the craft-based nature of the profession[12]. Industrialisation, divisions of labour and mechanisation eventually resulted in traditional skills being no longer required and organising work the old way became impractical. By the early twentieth century the majority of small workshops and their handcrafted ethos had disappeared (Sparke, 1987 p. 19). The digital communications revolution of the mid twentieth century impacted graphic design in the same way and for similar reasons and will be discussed further in the Chapter Four, pp. 156 - 158.

Many of the mechanised factories had a continued need for artistic skills. Factories producing homewares for the growing consumer demand in for example, textiles, wallpapers, and ceramics, required not only designers but also people skilled to handle the intermediate steps of applying the designs to machine production. Demand grew for skilled workers who understood both design and how to apply it to

[12] In this context the term 'profession' is used to denote paid work rather than an unpaid amateur.

mechanical processes. However, Brown (2012, p.160) explains there were no longer enough craftsmen existing to meet the demand. In response to this need widespread discussion began within the UK and Europe regarding how to provide arts education for workers. Writing on the history of art training James A. Schmiechen (1995, pp. 167-178) and Carl Goldstein (1996, p. 180) confirm that drawing and design classes at these new institutes reflected both demand by British workers and the creation from 1837 of government schools of design. These new artworkers, as the UK creative industries refer to them today, were neither craftsmen nor artists but a new kind of artisan. Unlike the pure designers that often worked in a freelance capacity, these artworkers were factory employees and subject to the demands of the employer (Sparke, 1987, p. 58). They engaged in the intermediary stages of application within the factory. Significantly in terms of this thesis, even the pure designers were not viewed as independent artist-creators but instead held a status at the higher end of what is now called the 'decorative' or 'applied' arts. Graphic design agencies today make the same distinction between the 'pure designers' or 'creatives' and the production led 'artworkers' who manage the process of bringing the design concepts to life by translating them into a process fit for mechanical reproduction.

Citing Charles R. Richards (1927) and Yvonne Brunhammer (1992), Shiner (2001, p. 210) states that in Western Europe at this time, separate schools and museums for the decorative and applied arts were created in parallel to the academies and museums of fine art. The South Kensington Museum (now the Victoria & Albert Museum) opened in 1862 with other museums of the applied arts appearing in Vienna (1864), Paris (1864), and Berlin (1867) as part of a competitive 'art and industry movement'. Established fine artists occasionally designed for private or industrial clients, for example Whistler's *Peacock Room* (1876-1877*)*, without losing their status as independent artist creators. However, the image of the craftsperson or artworker remained in the main associated with making, imitation, and dependency through working in factories and engaging in trade.

Commercial Art

Commercial art developed as a response to the mass communication needs of the Industrial Revolution and addressed the growing needs of production and

consumption in the consumer societies of the late nineteenth and early twentieth centuries (McCoy, 1990 p. 4; Hollis, 2001 pp. 25-96). McCoy (1990, p. 7) notes that the rapidly expanding reproduction technologies such as lithography (1798-1799) and chromolithography, the mechanisation of the printing process, and increased literacy led to a greater public demand for printed materials such as broadsheets, small books, newspapers, and posters. This in turn required the commercial artist to participate in and respond to the economic, political, technological, and social changes occurring at that time.

With the advent of lithography, chromolithography, and the introduction of colour to the printing process, type and image in publications were no longer considered as separate elements. They were combined in a more fluid way than had been possible with combinations of metal type and separate illustrations - the process that had continued from the fifteenth century craft-based print shop. These technical developments encouraged experimentation by fine artists such as Eugene Grasset (a pioneer in Art Nouveau design) and Toulouse - Lautrec (influential in both Art Nouveau and also Post-Impressionism). The design of printed publications therefore began to be controlled more by artists and craftsman designers than by compositors and printers (Meggs, 1998 p. 148; Hollis, 2001, p. 17). However, over the course of the nineteenth century, the specialisation of the factory system and the division of labour associated with the Industrial Revolution split publication design into separate design and production processes and aligned the commercial artist with trade and the factory. This split remained in place until the late twentieth century and the development of the digital age (Meggs, 1998 p. 455).

Art and Society

Whilst the decorative arts (including commercial art due to its craft associations) were evolving in the main as industry led disciplines, the fine arts were now disassociated from social contexts such as functionality and the production of everyday artefacts. They were also distanced from commercial realities by the ideals of the artists individual creativity, autonomy, and the perception of the self-contained work.

When discussing fine art in relation to the nineteenth century historians of aesthetics usually focus on the arguments between those who believed in 'Art for Art's sake' (Gautier, Baudelaire, Whistler, Wilde) and those who believed in the 'social responsibility of art' (Courbet, Proudhon, Ruskin, Tolstoy). Sparke (1987, p. 71) explains that 'Art for Art's sake' was a term used by some artists, writers, and critics during the first half of the nineteenth century to express the idea that art has its own value which should be judged accordingly, and that it is separate from other aspects of life. They argued that art was valuable simply as art and that artistic pursuits were their own justification. However, Shiner (2001, p. 222) argues that following tradition the majority still believed that serious works of art should embody significant moral content. In the UK, as in France, many of the early Romantics expressed their social and political engagement through their work. Later, the Victorians, led by the art critic John Ruskin, never doubted the high moral and social purpose of art in terms of both reforming and beautifying what was considered the crass, utilitarian, and materialistic society of the Industrial Revolution that the commercial artist engaged with. Sparke (1987, p. 71) observes that by the middle of the nineteenth century in the UK, discussions on fine art and the aesthetic was firmly established and the tension between art as a separate institution and its role as a moral or social educator began to be acknowledged. By the end of the century, aesthetes such as Oscar Wilde and formalist[13] critics such as Roger Fry, a member of the Bloomsbury Group, attacked Victorian moralism in art arguing that artworks should be viewed strictly in terms of their relation to the art world. However, both positions in the debate of Art for Art's sake acknowledged that art was an independent realm separate to the rest of society further reinforcing the differences, expectations and values between art, craft and design that now existed.

The Arts and Crafts Movement

As a reaction to the industrialisation of the design processes during the latter part of the nineteenth century leading theorists such as John Ruskin, architects such as C. R. Ashbee and W. R. Lethaby, and the artist, designer, writer, and socialist William

[13] Formalism in art is the study of art which analyses and compares form and style – in painting formalism emphasizes compositional elements such as colour, line, shape, texture, and other perceptual aspects rather than iconography or the social and historical context.

Morris challenged the division of labour and the devaluing of the work and creativity of the craftsman. John Heskett (1992, p. 119) explains they developed ideals around the theme of re-uniting art, craft, and technology in the service of society recreating the values of the Middle Ages. They also challenged the thinking of the day that saw fine art, craft and design as different disciplines with distinctly different values and practices. Their thinking was embedded in the institution known as the Arts and Crafts movement that began in the UK and eventually spread to Western Europe and America. One of the stated aims of the movement, and one that looked back to the time before the division within the arts experienced during the eighteenth century, was to restore the unity of the arts believing that all creative endeavour was of equal value. The movement sought not only to reform craft, art and design but to reinstate quality to the work process itself, a value that they believed had been lost due to the mechanisation processes. By reintroducing hand-craftsmanship into the production process of well designed, affordable, everyday objects they hoped to re-establish the position of the artisan as maker and thus re-establish the craftsman as the creator within the process. Elizabeth Cumming and Wendy Kaplan (1991, p.6) argue that the practitioners within the movement shared the ideal of individual expression and of design that could draw its inspiration from the past without the need to slavishly copy or imitate historical form and pattern books. As observed earlier, this is a practice that is common in graphic design and one which is often criticised today.

Alan Crawford (1985, p. 30) argues that the improvement in quality of commercial design was equally as important to the movement as the restoration of craftsmanship and groups of leading designers set up both craft societies and independent commercial companies. By the height of the movement at the turn of the century new links had been forged between craft and industry. Cumming and Kaplan (1991, p. 45) confirm that due to the radical changes in design education introduced by the Arts and Craft leaders, manufacturers sought out the newly trained artists and craftspeople (or designer-makers as they are referred to today) and the machine became accepted by many craftsman as both a manufacturing necessity and in essence a craft tool. The discussion regarding machines as a tool of the trade and a manufacturing necessity, and the perceived lack of creativity and individual expression by designer-makers, would be revisited in the middle of the twentieth century when the practice of graphic design was introduced to the Apple Macintosh

computer (1984). Now used as an industry standard tool within the discipline it was regarded with distrust as a threat to creativity and individual expression when first launched. This point will be taken up in Chapter Four, p. 159.

In an effort towards social philanthropy the Arts and Crafts movement reintroduced the model of the craft production workshop not seen since before the eighteenth century with the intention of using the craft revival to moralise the working class. However, Gillian Naylor, 1990 p. 9) explains that when the workshops such as Morris & Co. came to sell their products it was mostly the wealthy that could afford to buy them. The failure of the movement was due to its anti-machine bias and nostalgia for a workshop production method that was impossible to replicate on a large scale leading to artefacts being unduly expensive and therefore out of the reach of society as a whole. However, Cumming and Kaplan (1991, p. 207) argue that although the movement failed ultimately to achieve its goals this should not preclude appreciation of its many achievements. It left important legacies within design education (a theme that will be developed in Chapter Five), the development of industrial design and the continuation of craft studios. Although it did not succeed in its aim of cultural regeneration, it did provide a framework for recognising the contribution of the individual designer-maker and the role of creativity and innovation in an increasingly mass society. Ultimately however, for manufacturers and retailers, the Arts and Crafts style was simply a fashion trend or marketable style (Cumming and Kaplan, 1991, p. 7).

Shiner (2001, p. 240) argues that there were two significant themes that emerged from the Arts and Craft movement (although each had other attributable sources as well) that impact on design practice today. The first was the ‘studio craft movement’ that encompassed for example, small production potteries, weaving workshops, and furniture studios. The second was the idea of ‘total design’ that closely linked the decorative arts to both architecture and industry. For example, architects such as Philip Webb and W. R. Lethaby in England, and Gottfried Semper and Peter Behrens in Germany, envisioned a cooperative relationship between architects, artists and craftspeople all contributing towards the same project. This has parallels with the practice of graphic designers today working in collaboration with interior

designers, web designers, illustrators, photographers, and marketing communications specialists within the creative industries.

Assimilation and Resistance within Fine Art

The latter part of the nineteenth century firmly established the understanding and institutions of the contemporary system of art as we know it today however there are two specific developments that further reinforce the division between craft and art. The first of these is what Shiner (2001, p. 226 - 239) refers to as 'assimilation' and the second is 'resistance'. By assimilation he is referring to the gradual expansion of the domain of fine art from its core of poetry, music, painting, sculpture, architecture, and dance etc. to include new or previously excluded arts. These include photography (nineteenth century), 'primitive art' (early twentieth century), arts in 'craft' media (1950's), and almost anything from the 1970's onwards. Resistance relates not to opposition to the expanding boundaries of art but a more radical resistance to the deeper divisions of the art system. Sometimes this has been in relation to craft in terms of acknowledging functional or popular arts and sometimes in relation to the older union of art and craft in terms of attempting to reintegrate art and society or art and life. For example, writing about socially responsible and socially responsive public art, Suzanne Lacy (1995, p. 13) argues that contemporary art has a social purpose and the conception, location, and funding of community-based projects makes them art for society. Today, it is the fine art community that is addressing political and social agendas while the applied arts (including graphic design) are in the main continuing to engage with the needs of supply and demand in response to mass consumerism. This will be discussed in more detail in later chapters.

By the beginning of the twentieth century, and despite there being a new respect for good design and an aesthetic appreciation given to the applied arts, the art-versus-craft discussion continued to control thought and practice. Craft (decorative/applied art) continued to be considered as the skilful making of items of utility while refined pleasure, creativity, intellect, and the aesthetic remained aligned to fine art (Richard Shusterman, 2000 p. 139). This polarity of thinking was equally applied to the discipline of commercial art (graphic design) that was by now considered both by

education and industry as one of the applied arts. These opposing views underpin many of the discussions regarding the importance, value or artistic merit of graphic design today and are used as a measure of creative practice. Separate applied art museums or departments for craft within fine art museums were still in place for what were called 'decorative', 'applied', or 'minor arts', and the term 'craft' had an ambiguous status due to its association with other activities such as sewing and pottery (Shiner, 2001 p. 243). This remains the case today. Design or specifically graphic design was not discussed as a separate discipline.

However, the dramatic events of World War I (1914-1918) and the Russian Revolution (1917-1923) significantly influenced artists, craftsman and designers seeking to deal with the nature of industrial society. They rejected the historical division that separated them and engaged in activities associated with visual communications[14] such as posters and propaganda material alongside their more traditional fine art practice (Meggs, 1998 p. 233; Heskett, 1992, p. 121). These artists, craftsmen and designers now concentrated on the reason for producing artefacts rather than simply their decoration. Functional expression in the service of moral and social renewal was embraced and valued as readily as the perceived 'purer', self-expressive goals of fine art (Heskett, 1992 p. 121). It represented a period when art and craft practice was again combined in the service of society and both held a place of dignity in the overall scheme of knowledge.

Design as a Discrete Discipline

Building on the framework provided by the Arts and Crafts movement the early twentieth century saw both the development from the craft tradition of the individual designer maker and recognition of the role of creativity and innovation in an increasingly mass society. Both had significant impact on the emerging discipline of design. This framework underpinned the work of artists, craftsmen and designers engaged in what is today referred to as Modernism and provided the basis by which the Bauhaus was conceived. This section considers the emergence from the craft

[14] Visual Communication is the conveyance of ideas and information in a format that can be viewed. As a discipline it is broad and encompasses graphic design, signs and semiotics, advertising, image generation such as illustration, animation and photography, typography and screen-based design.

tradition of the individual designer maker, specifically the graphic designer, and explains how the discrete practice of craft, art and design converged to become a single inclusive practice reminiscent of the artisan-artist. Graphic design will be discussed in this context and its practice will be considered in terms of its role in relation to art and life, where art is considered in the service of society and where its function cannot be separated from its purpose in terms of utility, moral value, and appropriateness to the situation. As design is a critical part of material culture, Heskett (1992, p. 125) argues today's concern should be with its place in everyday life and with the interactions of creativity in society. This is an important point in relation to the role of creativity in graphic design and the question of the designer's role and responsibility in society.

The Bauhaus

Founded at the end of World War I, the Bauhaus School of Architecture, Art, and Crafts (1919 – 1932), combined the Weimar School of Fine Arts with its School of Arts and Crafts thereby uniting art, craft and design and restoring the social purpose of art. Created by the architect Walter Gropius, its manifesto not only announced the ideal of overcoming the art versus craft division but also reflected the inherent difficulty in doing so (Sparke, 1987, p. 145). According to Éva Forgàcs (1991, p. 8) Gropius recognised the difficulty in getting artists to accept and value the role of learning craft skills and working cooperatively on functional design. This tension was equally reflected in the organisation of the school. Design was taught by the form teacher whilst materials and craft skills were taught by the practice teacher. Unlike today, the Bauhaus assigned no hierarchy in terms of the perceived value of the activities. This model is still used today in UK Universities and Art Schools. Academics teach the perceived higher valued design thinking and technicians teach the mechanical skills associated with the craft side of the discipline for example, computer software skills in graphic design. The primary aim of Gropius was to draw together art (creating), craft (making), and technology in the training of designers and architects. McCoy (1990, p. 6) observes that although some of the artists involved never lost their sense of superiority and autonomy, others such as the painter and photographer Lazlo Moholy-Nagy, became dedicated to the aim of uniting art, craft, and technology in the service of society. In doing so Moholy-Nagy

and others at that time produced some of the first professional graphic design by applying their artistic experiments to the practical communication needs of manufacturing clients.

When the architect Hannes Meyer succeeded Gropius in 1928 the Bauhaus was considered the leading centre for Modernism in design. Magdalena Droste (1998, p. 16) argues that Meyer's architectural views combined an austere Modernist style with a commitment to teaching design in a 'functional-collectivist-constructive' manner. However, in 1930 Meyer was replaced by the architect Ludwig Mies van der Rohe who turned the workshops into studios (the model that is still used within the creative industries today), moved the curriculum towards pure architectural theory and design, and eliminated craft. Shiner 2001, p. 262) notes that Meyer provided students with design problems based on specific social needs. However, design problems set by Mies van der Rohe were intellectual design tasks with little in the way of technical or mechanical specifications. The last four years of the Bauhaus therefore, founded to unite art, craft, the aesthetic and the functional, was spent swinging from the polarity of art in the service of society to art for art's sake.

The ideology of the Bauhaus, to reunite art and craft and bring together both the creative and technical making aspects of practice, was new. It took time for their ideas to come through into the mainstream. For example, even though functional items produced for commercial distribution were displayed in places such as the Museum of Modern Art in New York, these items remained part of what was considered the applied or decorative arts. By ensuring the success of Modernism and functionalism in the design of everyday objects, including design for print, the Bauhaus came closer to its goals of reuniting art and life than any other design ideology at that time. However, they were finally assimilated, by formalist art history and art museums, as styles and theories of art thereby neutralising their stance against the separation of art, craft, and the newly defined discipline of design (Shiner, 2001 p. 262). Their ideology was very influential however, particularly on the discipline of graphic design, where their ideas can still be seen in the teaching of graphic design today. This will be discussed in more detail in Chapter Five, p. 179.

Graphic Design

The innovation in printing technology of the late nineteenth century, together with the ideology of the Bauhaus, saw commercial art emerge as a discrete practice in the early twentieth century (Hollis, 2001, p. 17). The faster and more flexible methods of printing discussed earlier enabled design to become easier to replicate. This allowed more time to be spent on design and layout and the creative aspects of the published work rather than the activity involved in the actual mechanical printing process itself which now fell to the printer and compositor. In 1922 the American book and type designer William Addison Dwiggins named this new activity 'graphic design' (Meggs 1988, p. xiii). Graphic design as a discrete discipline, separate from art, craft, or other forms of design, was becoming more evident due to the increase in information-based publications and mass consumer advertising (Meggs, 1988 pp. 249-299). Designers such as Alexey Brodovitch, Piet Zwart, Werkman, and Cassandre emerged not only from the tradition of book and typographic design but also from within other disciplines such as photography, industrial design and fine art where artists engaged in both social commentary and political comment. By embracing artists and designers from different disciplines thereby uniting art and craft, and by engaging in both social commentary and the social purpose of art, graphic design at this time was engaging in the older system of art that had not been seen since before the eighteenth century.

By the late 1950s, the term 'design' had become internationally recognised as a concept and was considered less superficial than a decorative art (craft). The old terms of decorative and applied arts were subsumed into this new concept and international trends in design development replaced national ones (Sparke, 1987, p. 211). A new design style based upon a neo-Bauhaus attitude towards form emerged and developed into an international design language referred to as the International Style. However, the style would lead to a homogenous and bland formalism that continues to influence graphic design today. This will be discussed in more detail in Chapter Four, p. 152. Spark (1987, p. 211) explains that as a reaction against the style and as a response to the changing socio-economic and intellectual climate at that time a new form of post-Modernism emerged (1965-1985). The mass culture

associated with Postmodernism challenged the fine arts and the avant-garde[15] and aesthetic judgements were replaced by the idea of popular culture and taste. This reinforced the polarities within the arts and demonstrated that the development of high and low art, high and low culture were not only to be found within the visual domain.

Many of the critics that have taken a negative view of popular culture and popular art (including graphic design), for example R. G. Collingwood, Dwight MacDonald, Theodor Adorno, and Clement Greenberg, have labelled it 'mass culture' or 'mass art' as it is not the culture of the people, but something produced by a manipulative 'culture industry'. These critics contrasted fine to popular art in terms of complex to simple, original to formulaic, critical to conformist, challenging to escapist (Shusterman, 2000 p. 169). However, those critics more sympathetic to popular art observe that history has demonstrated that popular art in one culture for example, Greek or Elizabethan drama, can become the high art of a subsequent age. Many of the great classics of high art in literature for example, Bleak House by Charles Dickens, were originally produced and consumed as popular art. They argue therefore that the best works of popular art are often complex, original, and challenging and note that the 'masses' should not be considered as an undifferentiated group of passive consumers but capable of scepticism and independent interpretation. Marketing communications experts and graphic designers today would agree. Mass consumer audiences are recognised and differentiated as multi-layered and structured into different taste groups reflecting different social, educational and ideological backgrounds.

The Digital Revolution

By the mid twentieth century graphic design, and advertising in particular, were key to creating the consumer economy of today (Brown, 2012 p. 162). Practice embraced the whole of the communications industry including advertising, editorial design, commercial TV and radio, the Internet including social media, marketing, and public relations. As such graphic design contributed to both the culture and economy of the

[15] The avant-garde relates to people or works that are experimental, radical or unorthodox with respect to art, culture, or society.

industrialised nations and represented a point at which the discipline began to emerge as a major economic force within society (Hollis, 2001, p. 10). As the centre of economic activity within the developing world moved from industrial manufacturing to knowledge creation and service delivery, Brown (2012, p. 154) argues that creativity and innovation was no longer limited to just the introduction of new consumer products but became significant to new ways of communicating and collaborating within society. Having evolved from 'design as making' to 'design as thinking' these human centred tasks are what graphic designers are typically engaged in today. However, writing on the concept of 'design thinking'- a human centred approach to problem solving (this will be discussed in more detail in Chapters Four, p. 149 and Six, p. 210), Tim Brown (2009, p. 25) argues that as designers are generally considered as makers due to their craft heritage, rather than critical thinkers, business leaders do not naturally consider them to be creative innovators. Therefore, as creativity and innovation are essential in engaging with the future needs of society design practice, particularly education, must address these misconceptions. As argued in Chapter Two designers should be taught to engage in the criticality necessary to working within and alongside both society and other disciplines that provide alternative skills. Both these issues will be addressed in Chapters Five, p. 202 and Six, p. 224.

The digital age and the birth of the Internet pushed the practice of graphic design into a state of flux. The Industrial Revolution had created a design process that controlled systems of production and distribution. However, Brown (2012, p.163) suggests that the digital age changed these linear systems of distribution from one provider to many receivers to distribution networks that now linked many providers to many receivers. This led to consumption that was more fluid and democratic. These 'open' digital systems created a shift from mass production to mass customisation and personalising. The digitising of the discrete operations within the design process, previously separated due to the mechanisation and standardisation of the Industrial Revolution, returned them to a single operation and saw the practice of graphic design once more become integrative. Today's technologies, such as the iPad, are no longer sources of information but sites of coordination where many processes of production and distribution are integrated within the control of a single individual (Brown, 2012 p. 164). However, because the design process from start to

finish is digitised and in the hands of everyone, everyone can now be a producer. This introduces new possibilities and challenges to the act of making (craft) and also potentially threatens the practice of graphic design. This will be discussed further in Chapter Five, p. 185.

The changes brought by the Digital Age have had significant influence on the social behaviour of individuals and groups. Brown (2012, p. 165) believes that there has been a revival of the ethos of the age before the Industrial Revolution where knowledge was distributed within society via a number of means including rituals, social systems, events, and images etc. Society today appears to want more than useful objects and is looking instead for meaningful engagements. Society is therefore engaged in a 'knowledge economy' in which values and narratives are the primary focus. It is no longer the object that matters but the values and narratives to which it is aligned. Today's Digital Age is complex. The old hierarchies of practice and systems of thinking inherited from the Industrial Revolution are collapsing and require new ones in order to bring coherence to today's world. However, Brown (2012, p. 165) and Margolin (2013, p. 402) argue that in confronting this task graphic designers still appear to be in a state of transition. Although they are embracing the Digital Age and global transformations graphic design is still understood by designers, the business community, and society at large, in terms of the older practice and habits inherited from the Industrial Revolution and its craft base. Design is still perceived as more concerned with stylistic conventions and surface decoration (form) than creativity and the social purpose of the design (function).

Due to its role in mass communications and consumption graphic design affects every aspect of today's material culture and the natural world. It is no longer a minority voice within society but a dominant force with the potential for tremendous good. However, the challenges of the twenty first century require both creativity and innovation in addressing societal issues. In order to deal with these issues, designers must engage with the moral and ethical issues involved in citizenship. However, to achieve this design practice needs a radical transformation in terms of practice. This is problematic for reasons identified by Margolin (2013, p. 400). Firstly, graphic design has yet to develop its own distinctive 'space', separate from art and craft,

where designers can come together to investigate and discuss topics around practice and methods and importantly the social value of design in a world that is becoming increasingly complex. Secondly, there is currently no consistency between what educators teach and what designers themselves consider the content of their discipline. This became apparent when reviewing the responses from the practitioners within the graphic design survey. Whilst the majority of practitioners discussed the importance of creativity and critical thinking in support of design this was invariably superficial and in terms of visual aesthetics or responding to consumer demand rather than serious consideration in terms of the role and value of design in today's society. This has serious implications because it inhibits the ability within the design community to make the valuable connections that are needed to understand the areas where design and related activities occur. As stated earlier, in order to address the complex issues surrounding twenty first century living designer's need to recognise that practice is more than styling products in response to today's material culture. As in the past, design should be considered in terms of its role and value to society. This will be discussed in more detail in later chapters.

In addition to the established practice of graphic design, the late twentieth and early twenty first century saw a proliferation of new activities that include graphic design as an activity within their practice. For example, service design, computer interface design and social design. Whilst they have become mainstream activities, Margolin (2013, p. 402) argues they have been integrated in a haphazard way with no attention given to their underlying theories and principles, methods, or purpose. Significantly therefore, like graphic design, they do not share a broader vision of where design has come from, what design is today and what its role in the future might be.

Conclusion

Graphic design has evolved from the craft tradition that is distinguished from the fine arts due to its association with the process involved in making items of utility rather than the pursuit of intellectual and creative skills. Historically craft as an activity was completely embedded within social, political, religious, and practical contexts within society. Practice involved working as part of a team whose combined efforts responded to commissions without concern for individual creativity. This

model of craft remains current today within the discipline of graphic design. Graphic design's role in the democratisation of knowledge and visual culture since the Age of Enlightenment and the popular culture associated with postmodernism and the digital age, has reinforced the view that graphic design is more concerned with surface decoration and stylistic conventions (form) than creative and critical thinking.

Challenges facing society in the twenty first century require solutions that are both creative and innovative. Addressing these societal issues will require designers to engage with the moral and ethical issues involved in citizenship and to radically transform their practice. However, this is problematic for two reasons. Firstly, graphic design has yet to develop its own domain, separate from art and craft, where designers can investigate practice and the social value of design. Secondly, there is currently no consistency amongst practitioners regarding the role of creativity and innovation in graphic design. Graphic design continues to be discussed superficially in terms of visual aesthetics and form or responding to consumer demand. This has serious implications for the discipline. In order to address the complex issues surrounding twenty first century living designer's need to recognise that as in the past, design practice should be considered in terms of its role and value to society.

Chapter 4 – Evolution of the practice of Graphic Design

Introduction

Graphic design historically has been a response to changes in practice and the needs of society. It has a social function that is responsive to conditions that call for human action. As these conditions change, new opportunities for graphic design also change. For example, with the current growth in technology, economic activity, political instability, and environmental change there is a continual requirement for new forms of practice to emerge in response to these conditions. However, although the products of design are visible and part of everyday life, there is insufficient understanding of the scope of graphic design and what defines its practice. Ellen Lupton (2009, p. 7) notes that this results in large amounts of design activity remaining unnoticed, unacknowledged or presented in a limited way.

Chapter Three argued that graphic design continues to be defined and evaluated using the craft model. However, the graphic design survey indicated the significance of creativity and critical thinking and the multi-faceted nature of design practice, making the continued defining of graphic design using this model difficult. Together with other issues including professional, technological, and economic forces, Craig Bremner and Paul Rodgers (2013, p. 4) are of the opinion that contemporary design practice is in crisis. This is not new. Writing from a historical perspective Dan Friedman made the same observation in his book *Radical Modernism* (1994) emphasising the designer's responsibility to consider their work as an important creative part of a larger cultural[16] context. Many scholars have investigated the idea of a design tradition and suggest that it requires the enabling presence of a design culture in order to define its conceptual space, boundaries and context in which design is conceived. However, Harold G. Nelson and Erik Stolterman (2012, p. 3) argue that graphic design has its own culture and tradition and is not merely a variant

[16] The term 'culture' is used within the chapter to include a number of contexts: a) culture as the distinctive ideas, customs, social behaviour, products and way of life of a particular nation, society, people or period. b) culture as the development of the mind, faculties, manners etc. improved by education and training. c) culture as the collective refinement of mind, taste, and manners in terms of artistic and intellectual development. d) culture as the philosophy, practices, and attitudes of an institution, business or other organisation. SOURCE: Oxford English Dictionary.

of art/craft, science, or technology. As such graphic design as a unique way of thinking and creating does not have a long scholarly history.

This chapter considers the development of graphic design as a discrete creative practice with its own culture and tradition and discusses its evolution from the early twentieth century into the discipline recognised today. The aim of the chapter is to examine the key issues that affect contemporary practice, particularly in relation to defining its culture and tradition and how these impact on the role of creativity within graphic design.

Changing attitudes towards Graphic Design

Politics, economics, the environment, and technology are the key influences that have determined the dominant cultural structures seen in modern society. All contemporary graphic design is shaped by the ideas and values expressed by society and therefore as a result, all designed artefacts can be viewed as cultural ciphers (Meggs, 1997, p. 53). The capitalism of the post-Industrial Revolution of the 1900s that created graphic design, and which continues to dominate it within contemporary Western society, is characterised by an alliance with both mass production and mass consumption. These have both determined and defined nearly all manifestations of graphic design observed today which as an activity is well integrated in current cultural evolution. Participant 8, from the graphic design survey, an Academic/Industry Practitioner, argues that as such design is a major indicator and influencer of ever-evolving cultural memes and currents in society.

Chapter Three explained that defining graphic design before the twentieth century was reasonably uncomplicated as practice was considered in terms of the surface decoration of artefacts in response to mass consumerism rather than creativity or critical thinking. Designers of the early twentieth century were considered artisans from the craft tradition engaged in making rather than creating. Scholars and design practitioners invariably discussed and evaluated graphic design in terms of influential visual styles and form making. However, Meggs (1998, p. 320) records that by the middle of the twentieth century a new attitude towards the discipline was beginning to emerge with graphic designers considering their practice as a socially useful and important activity. Design practitioners began to question the role of the

designer within society and designers found themselves required to respond to a range of issues for example, ethics and social responsibility. Equally, the significance of the role of graphic design in relation to commercial success was beginning to be realised by both business organisations and the design industry. Business organisations began to value the process of 'design thinking' that was perceived as both a particular skillset of the designer and a form of critical analysis that could be adopted by others outside the immediate discipline of graphic design. These discussions inevitably led to a dialogue within design practice regarding the viability and benefits of professionalising the discipline and as a consequence, definitions of graphic design changed dramatically over the course of the twentieth century.

Graphic Design as a Profession

The profession[17] of graphic design experienced a long period of transition as the practice of design was being defined. Jonathan Woodham (1997, p.167) observes that during the interwar years there was a great deal of uncertainty regarding the terms commonly used to describe the discipline such as commercial art, graphic design, industrial art or industrial design. They reflected the inability of designers themselves to establish a clear professional identity. The use of such terms provide significant insight into the changing politics of professional validation and the lack of clarity within the discipline regarding the remit of graphic design and its role in society. For example, the current professional body for designers in the UK, the *Chartered Society of Designers* (CSD) was originally conceived in 1930 as the *Society for Industrial Artists* (SIA) with the intention of nurturing the interests of the design profession in general. The commercial artists (graphic designers) were its largest member group at that time. Despite reorganisation of the SIA at the end of the Second World War it did not incorporate the word design into its title until 1965 when it became the *Society of Industrial Artists and Designers* (SIAD). Woodham (1997, p. 167) explains that the current use of the term 'chartered' by the CSD reflects the continuing drive within the design industry for more widespread

[17] In this context the term 'profession' is used to denote paid work rather than an unpaid amateur.

professional recognition by the business and manufacturing community at the expense of the term ‘artist’ which was dropped from the title.

In response to the rise in corporate internationalism and the ensuing growth in international design during the 1960s the *International Council of Graphic Design Associations* (ICOGRADA) was founded in London in order to link similar organisations in different countries. In 1964 it launched the ‘profession’ of graphic design in Zurich, Switzerland. Richard Hollis (2001, p. 136) notes that for the next three decades it helped designers to recognise their role within a wider community through conferences, meetings, and student competitions. The CSD and ICOGRADA are both current within the practice of graphic design and represent the national and international voice of the profession.

During the 1980s graphic design changed more radically than ever before as design became professionalised. Business organisations began to recognise and trust the design community with the result that the status and income of designers rose exponentially. Shaughnessy (2010, p. 99) asserts that this relationship with the business community consolidated during the 1990s and by the late twentieth century the value of design as a ‘commodity’ was recognised by both the business community and governments. This will be discussed further in Chapter Six, p. 214.

Over the course of the twentieth century and as a response to closer dealings with the business community the design industry discussed the issue of professionalising the discipline and professional design associations attempted to produce ethical codes to underpin the profession. However, they were undermined by either shifts in public and business morality or overtaken by rapid changes in technology. Writing in the 1990s, Ellen Shapiro (1997, pp. 155-164), Michael Rock (1997, pp. 168-171) and Gunnar Swanson (1997, pp. 164-167), each put forward arguments in favour and against attempting to implement an ethical code on the practice of graphic design. However, the prevalent view was that it would not be possible due to the diversity of practice within the discipline. More recently Bremner and Rodgers (2013, p. 9) also argued that professionalising graphic design would not be possible citing the continued diversity of practice within the discipline due in part to the development of digital technologies and the developing interdisciplinary nature of the profession.

Today the term professional practice in the context of graphic design relates to the disciplines alignment with the business community and the acquiring of skillsets more associated with business and industry than to the arts specifically. It does not relate to graphic design being considered an accredited profession because the diversity of work and skillsets involved mean it could be not be organised in this way. However, debate continues within the design community regarding the benefits of accredited professional status. Whilst the *Chartered Society of Designers* represents design in general it is recognised that neither this institution nor the practice of graphic design conforms in terms of what it means to be a profession. However, in its move towards professionalisation graphic design has addressed some of the required attributes and characteristics of an accredited profession. Understanding these is important as they contribute towards establishing both a culture and tradition for the discipline and provide a platform from which to discuss the role of graphic design in terms of its interaction with society and culture and therefore the role of creativity in graphic design.

Characteristics and Attributes of a Profession

There are four essential attributes that characterise a profession; generalised knowledge, focus on the professional community interest, an internalised code of ethics (John A. Jackson, 1970 p. 8) and prolonged specialised training in a body of abstract knowledge (C. Turner and M. N. Hodge,1970 pp. 19-50). These attributes are maintained by research activity, professional literature and legislation (J. Ben-David, 1963 p. 251). The association of the traditional professions for example, law and medicine, with universities and higher education generally, demonstrate the relation of a profession to some branch of learning. Jackson, 1970 p. 9) proposes that professions acquire their power and prestige in part from formal academic training combined with elements of socialisation and initiation into the wider ideology of the professional group – the 'community of practice'. Jackson (1970, p. 4) and G. Harries-Jenkins (1970, p. 74) argue that the academic theory that underpins the skills of a profession and its link with professional skills is one of the most important indicators of professionalisation. It is this linking of theory with practice that separates members of a professionalised group from others. (This is an important point in terms of defining professional as opposed to amateur practice and will be

discussed in more detail in Chapter Five, p. 173). However, there is a tension in professional training programmes between abstract intellectual training and the pursuit of knowledge for its own sake and the need to develop skilled practitioners, which is considered a lesser activity, based on hands on training. This tension can also be seen in graphic design educational programmes and will be discussed further in Chapter Five in relation to the education of the graphic designer. Whilst some non-professional occupations involve the exercise of a high degree of skill and may exist independently of any body of theory, as observed in Chapter Three these practitioners are categorised as craftsmen rather than professionals. Today, graphic design practice is aligned with university level study and as such benefits from a theoretical underpinning linking theory to practice. However, whilst most graduates coming into the industry are now Bachelor of Arts accredited this is an academic qualification and not a professional one. Aligning the practice of graphic design to this model within higher education was an attempt to professionalise the discipline by providing an intellectual tradition and a legitimising structure of authority and competence raising the discipline beyond the craft element of techniques and skills.

Professions are generally organised in terms of their community or the formal structures by which they are governed. The community approach is characterised by W. J. Goode (1957, p. 194) and includes the following, members are bound by a sense of identity, members share common values, role definitions are agreed and are the same for all members, within the community there is a common language that is only partially understood by outsiders, the community has power over its members, it produces the next generation through its control over the selection of professional trainees. Whilst the *Chartered Society of Designers* and many design practitioners adopt some of the characteristics of a profession this cannot be said of the whole community of practice and there is significant variance in attitude to some issues for example, the sharing of common values. Equally, as not all practitioners are members of the professional body the community has no power over its members or control over the selection of professional graphic designers although it does have involvement with their training. The emphasis within the community approach is on qualitative aspects of the relationships between a group of professionals and between a professional community and the wider society. The design community by comparison has no control over the qualitative aspects of either the relationships

within the community of practice or between individual practitioners and the wider society.

In contrast to the community approach the formal structures approach tends to concentrate on organisational mechanisms and techniques and their consequences for the pursuit of specified organisational goals. It emphasises the numbers within the membership, registration and licensing of 'competent professionals', the codification of standards of practice and conduct, and the application of formal controls over members (Turner and Hodge, 1970 p. 33). None of these are applicable to the design community and cannot be enforced by the *Chartered Society of Designers.*

Professionals today are often employed within an organisation rather than acting as an independent practitioner operating in an entrepreneurial role. Equally, graphic designers work as both freelance practitioners within a design agency environment, and within internal design departments in business organisations. Harries-Jenkins (1970 p. 53) explains that this may require participation in two irreconcilable systems – the profession and the organisation. Both control activities that may be in conflict. For example, a profession might recommend a scale of charges or fees and ban members from undercutting one another. However, an organisation such as a design agency, or a freelance designer, operates within a free market and may competitively pitch for new work and clients against professional designers in other agencies. Equally, ethical standards held by the professional body might be in conflict with client briefs. These issues contribute to the difficulty in attempting to organise the design community into a formal profession.

Turner and Hodge (1970, p. 29) confirm it is extremely unlikely that any profession will be able to claim a monopoly over the full range of activities within a discipline and there may be a complex division of labour within identifiable occupational groups. This might include formal differentiation between subsets within an occupation. For example, it could be argued that graphic designers and multimedia designers constitute distinct occupational groups or alternatively that editorial designers and packaging designers constitute distinct fields of specialism. In terms of graphic design what appears not to have been considered in the literature is the extent to which, whilst the organisation of the discipline and its underlying theory and tradition is common to all graduates, the division of labour experienced in

industry necessitates consideration of the stratification of the design role in employment. For example, all designers start as juniors within the design agency and have a distinct career progression through senior designer/creative director roles. However, there is possibility of moving sideways into more artwork or account handling related activities rather than strategy, creative ideation, design, and problem-solving activities. Professional designers and academics for example, Participant 5 an Academic from the graphic design survey, differentiate between what is considered the creative and intellectual aspects of design and the day-to-day 'jobbing' activities that define the two extremes of the discipline. Salaries also reflect this distinction. Comparison can be made with the medical profession where historically the medical practitioner had autonomy and control over all aspects of a medical intervention and procedures. However later, with the development of different roles within the discipline such as general practitioner, senior consultant surgeon and medical researcher different tiers of the profession were identified and today not everyone involved in medicine is differentiated as part of the profession.

The traditional professions for example, medicine and law, provide the ideological basis for what constitutes a profession by providing a declaration of intent, a bid for recognition and an attempt at justification. These constitute a charter (Turner and Hodge, 1970 p. 28). The bid for recognition may take the form of a claim to exclusive possession of knowledge and associated techniques or to their greatly superior application. The justification is commonly presented on many grounds including the possession of specialised knowledge and high skills, the performance of tasks of high social value, the image of community service and dedication, and the denial of competitive claims. Whilst these should be the goals of design practice today the reality is far different. Not all design practitioners have been formally trained, not all design briefs are in support of the good of society and there is no agreed scale of fees ascribed to types of design work. Competitive pitches are commonplace within the industry. To be useful to its members a charter depends on the degree of recognition accorded to it by critical sectors of the population as well as upon its exact content. Whilst the *Chartered Society of Designers* and other leading design institutions such as the *Design Council* encourage critical debate around design related issues their impact is based solely on the contribution of those designers that choose to engage with them. Their voice is therefore not

representative of the industry as a whole. Codes of ethics are one aspect of a charter that are often underwritten leaving a considerable area outside prescriptive ethical rules. Turner and Hodge (1970, p. 29) explain they are notable for their high level of abstraction and therefore ambiguity at a practice level. Whilst the *Chartered Society of Designers* subscribe to the idea of promoting ethical standards, they are unenforceable due to a variety of practice considerations including the free market nature of practice, the debate regarding the role of the designer in today's consumer society and the fact that not all practitioners are members of the Society. Ethical considerations are currently evaluated on a case-by-case basis by individual practitioners.

Professional Associations and Societies that have been established for occupational groups, for example the *Association of Illustrators* or the *Chartered Society of Designers*, often become the centre of authority for the group. However, whilst they may suggest that their major functions are educative in nature and may confer on their members the right to use designatory letters after their name these are not indicative of any educational qualifications or professional skill. Traditional Associations and Societies have established the objective of examining and qualifying individuals who wish to become practitioners in the field with which they are concerned. Harries-Jenkins (1970, p. 62) argues therefore that the principle requirement for admission to membership is the knowledge and ability to pass the examinations of the Association or Society. However, the charter or articles of incorporation may, in an attempt to ensure the exclusiveness of the group, insist the potential members satisfy other criteria, for example the *British Medical Association (BMA)*. The *Chartered Society of Designers* have attempted to emulate this model however whilst admittance is primarily on the basis that designers have an educational qualification at an appropriate level admittance might also be on the basis of an interview and review of their portfolio of work. The grade of membership is based on the number of years as a practitioner. Jackson (1970, p. 12) argues that Associations and Societies whose main objective is to increase the size of its membership and who are not interested in enforcing rules and regulations that govern occupational behaviour do not really contribute to the professionalisation of the occupation. This is unlike the *BMA* where the occupational activity is controlled by the Qualifying Association to the extent that non-members cannot carry out the

work function. Only in a Registering Association, where statutory requirements are 'registered' for members to ensure that performance of group activity is restricted to those individuals whose names are included in a currently valid register, can members be classified as professional practitioners.

David Wang and Ali O. Ilhan (2009 pp. 5-21) assert that on a pragmatic level the *Chartered Society of Designers*, does not have any legally enforceable codes of practice that might serve as some measure of professionalisation. They also observe that the numbers of designers registered with them are only a fraction of the known numbers of practising designers employed within the industry. This suggests that signing up to even symbolic professional representation is not regarded as important by designers. In the absence of a professional code of practice or a precise description that demonstrates why design is professionally distinctive, Wang and Ilhan (2009, pp. 5-21) argue it may be better to consider design in terms of how the discipline relates to other knowledge domains. How designers are consolidated as a social group and how they format themselves in relation to other groups or domains they suggest is more significant in defining design practice than attempting to qualify and define an internally defined professional code of practice.

Jackson (1970, p. 6) asserts that a key characteristic of a profession is the service ideal and an interest in universal problems or social concern. Whilst graphic design is considered a service led discipline engaged in solving problems of social concern it does not achieve the status of a profession. This is because with the rise of mass design education and the availability of proprietary hardware and software its power and prestige are compromised by the fact that in general the tasks it performs are within the perceived general competence of anyone with a home computer. In order to put some clear distance between professional and amateur practice addressing those characteristics of a profession that are achievable within the context of design practice for example, social responsibility, would contribute towards this.

Graphic Design and Social Responsibility

Graphic design as a discipline and career choice has a cachet today that would have been unheard of during the early twentieth century. This is due in part to its association in the 1980s with fashion and designer celebrity. However, Herbert

Spencer (1964, p.157), Natalia Ilyin (1994, p. 39) and Shaughnessy (2010, p. 23) argue that because graphic designers are in a strong position to influence society by the way they inform and what they choose to engage with, designers must take responsibility for their actions. Many design practitioners and design writers are again arguing that graphic design would benefit from an ethical code and professional status. The issue is pertinent due to the increasing role of the designer in society that has grown as a direct response to, and recognition of, the relationship between graphic design and culture. However, there continues to be tensions within the discipline regarding these today that are a direct result of historical positions taken by different practitioners within the design community. These issues have yet to be resolved.

First Things First Manifesto

Throughout the early part of the twentieth century graphic design developed to respond to the needs of the growing international corporate culture of multinational business organisations and to the rise in consumerism. McCoy (2005, p. 3) suggests that this led to the understanding by many that graphic design was a subset of advertising. However, as observed by the signatories of the *First Things First* manifesto published in London in 1964 by Ken Garland, all societies have far broader communication needs than purely commercial ones. When the manifesto was published many free-market countries, including the UK, recognised that there were graphic design needs beyond advertising. McCoy (2005, p. 3) notes this led to a split between advertising art direction and 'pure' graphic design and this was reflected in how design schools developed their curricula. This will be discussed further in Chapter Five. The manifesto was a call for a return to humanism in design and suggested focus should move towards design education and public service tasks that promoted the betterment of society. However, Hollis (2001, p. 135) argues this was simply an appeal to work more in the areas of information design rather than a radical re-appraisal of creativity and innovation within design or the role of the designer in society.

There is a tendency within graphic design to follow current visual style trends that enables the most ephemeral forms of graphic design to be celebrated. Steven Heller

(2002, p. 3) argues that the *First Things First* manifesto therefore became a rallying cry for practitioners seeking to balance profit-making business with profitable social responsibility. The manifesto argued that passivity by designers could no longer be tolerated. Whilst the manifesto had an impact on the design conscience it did not have any practical influence on day-to-day design practice. It was almost forgotten for over three decades until 1999 when in response to another rise in socially responsible rhetoric a revised *First Things First* manifesto was signed by a younger generation of designers and published throughout the design community both in the UK and the US. Its content continues to resonate today. Rick Poynor (1999, pp. 8 -9) explains that the critical distinction made by the *First Things First 2000* manifesto was between design as communication (providing information) and design as persuasion (providing reasons to purchase) and argues that it correctly predicted how the discipline of graphic design was developing.

The main criticism of the *First Things First 2000* manifesto was that it pressed for an idealism that was impossible and impractical to engage with on an everyday basis, a view generally recognised by design practitioners (Monika Parrinder, 2002 p.14). It provoked heated debate in the leading design press such as *Eye* magazine, *Émigré*, *Design Week* and *Graphis.* Parrinder (2002, p.14) suggests this was due to confusion regarding the actual wording in terms of whether what was being called for was an 'awakening of conscience' or the wholesale rejection of commercial work. The manifesto provoked questions but did not supply answers. Parrinder (2002, p.14) argues that the manifesto was inspiring but reductionist in the way it positioned socially responsible work as something separate and opposed to the commercial sphere of graphic design. She observed that not all corporate work is trivial or based on selling something and many socially useful organisations and media are managed by bureaucratic power structures. The fact that graphic designers are involved within the power structures of commerce does not negate any position of opposition but actually refocuses it. She argues that designers do not need to say 'no' to a client, however they do need to recognise that they have a position of responsibility and can challenge the commercial attitudes from their position as mediators for commercial clients. In order to do this, designer's need to understand the specific cultural contexts in which they work and also their effect as mediators in their process. However, not all practitioners are comfortable or confident in this role as Participant

30, a technician from the graphic design survey, confirmed "*I do as I'm told, I'm providing a service to my client"*.

Although designers of the past were not culturally insensitive, Jorge Frascara (1988, p. 18) argues it is culturally insensitive today to continue to evaluate design purely on stylistic innovation. Whilst the traditional approach by scholars to graphic design history is to applaud style heroes, design he suggests should be recognised for its social and cultural relevance, the effectiveness of design solutions, and the contribution design makes to supporting and fostering the welfare of society. McCoy (1997, p. 212) agrees, however, she asserts that the profession has been trained to consider political and social concerns either fall outside the remit of the designer or are inappropriate to the work. She argues that this should be addressed through contemporary design education. The key skills in the design process include being able to conceptualise and evaluate a multi-dimensional issue, critically evaluate scenarios of use, think laterally and creatively, evaluate ideas, and communicate effectively. As the needs of society become more sophisticated with people wanting to do and achieve more, this process of design thinking[18] will become increasingly important as a skill for anticipating and working through problems, issues and opportunities (Nico MacDonald, 2002 p. 20). Participant 31, an Industry Practitioner from the graphic design survey, agrees stating that "*the role of creativity in graphic design is defined in terms of the designer's ability to engage an audience through an emotional connection that can either be visual, the written word or a combination of both*".

However, graphic design continues to be obsessed with visual aesthetics and form to the exclusion of almost everything else. As observed in Chapter Three this obsession has persisted throughout its development and the issues of ethics and the professional status of graphic design remain unresolved. Poynor (2002, p. 9) asserts that advertising and graphic design are more closely aligned today than they have been at any point since the 1960s. He confirms that within the design press, in the

[18] 'Design thinking' is a process for creative problem solving and is a human-centred approach to design and innovation that integrates the needs of people, the possibilities of technology, and the requirements for business success. SOURCE: www.ideou.com.

judging of design competitions such as D&AD[19], in policy statements from design organisations, in the words of senior design figures, and in large sections of design education very little is discussed except the visual style or commercial benefits of design. Citing the critic Johanna Drucker, Poynor (2002, p. 9) explains that what is at stake in contemporary graphic design is not the visual style or form of design practice but the life and consciousness of the designer and by association society at large. Drucker argued that in considering the ideological basis of commercial culture designers should be addressing the issue of in whose interest is something being produced and to what ends. It appears that this issue is being addressed today in some educational institutions. Discussing the desired skillset of a design practitioner today Participant 21 from the graphic design survey, an Academic/Industry Practitioner argued that what is essential is *"a broad visual and culturally informed creative cognitive ability and the skills to then focus research to inform and develop the resultant original concepts to ultimately produce the most effective design outcome".*

However, much of the discussion around graphic design today by both writers and practitioners is around visual style, form, and the language of graphic design rather than the importance and value of both content and meaning. Significantly, the focus on visual style is to the detriment of discussions around the importance of ideas within the communication process with no distinction being made between visual creation and visual manipulation (Frascara, 1988, p. 18). This concurs with the discussion in Chapter Two and Three regarding the importance of creativity and critical thinking in graphic design practice. Ilyin (1997, pp. 37-39), Poynor (1997, p 65) and Frascara (1988, p. 18) all argue that if designers provide no more than a technical service (making) without thought to their actions or what they are saying then the democratisation of design leaves designers with little to offer by way of added value from anyone else with a desk top computer. This will be discussed further later in the chapter. It also suggests formal professional accreditation for design practice would be impossible to achieve. If the profession of graphic design is to remain relevant, then designers need to confront these issues and re-state their role

[19] D&AD (Design and Art Direction) is a British educational charity created to celebrate and promote excellence in commercial creativity. SOURCE: www.dandad.org.

and value to society. Contemporary designers are now addressing this by working on projects that emphasise for example, corporate and social responsibility, environmental issues, service design, designing against crime, globalisation and glocalisation, sustainability and ethical sourcing (Mike Press and Rachel Cooper 2003, David Hands 2009, Malcolm Gladwell 2001, R. Barbrook 2007, Mark Earls 2002). However, in the main, design practitioners continue to provide uncritical design in response to mass consumerism.

Graphic Design as Creative Practice

Graphic design is commonly understood as a type of creativity and creativity is the activity that gives design its special qualities. However, writing specifically in relation to product and industrial design, Nelson and Stolterman (2012, pp. 4-5) argue that whilst creativity is critical to design, design as a discipline is larger and more comprehensive inclusive of not only critical thinking but innovative, productive and compositional activities also. This parallels with graphic design and the findings from the graphic design survey confirm this view. Innovation and production differ from creativity because they focus on actions within the real world while creativity can be produced of its own sake (See Chapter Two). Nelson and Stolterman (2012, pp. 4-5) confirm therefore that design is realised through the production of ideal, although not always creative, ideas into the real world. Many of the design practitioners from the graphic design survey concur with this view (See Chapter One, p. 42).

Chapter Three argued that the difficulties in defining creative practice today are a result of viewing graphic design as purely an extension of the craft tradition of making that dates back to antiquity or as the decoration of artefacts by the commercial artist. By contrast, Nelson and Stolterman (2012, pp. 11-12) argue that design has its own tradition that can equally be traced back to antiquity. They suggest that design, distinct from the arts and sciences, should be considered in terms of 'sophia' (wisdom) defined as the 'knowing hand' rather than 'techne' or craft. Unlike techne, sophia integrated thinking, action, reflection, and production. They explain that just as there is confusion regarding architecture as sitting somewhere between art and science, design is also misrepresented as sitting between the applied

arts and sciences. Design they argue has its own culture with its own approach to learning and inquiry (this will be discussed further in Chapter Five, p. 191) and includes the reasoning of science with the creativity of the arts. However, just as science is inclusive of creativity it does not follow that science is the same as art or that art is subsumed under science. They both suggest different ways of approaching and experiencing the world. For example, descriptions of Leonardo da Vinci as either scientist or artist miss his credentials as a designer. His practical, purpose-driven and integrative approach is principally what makes him so distinctive within his own time and today (Nelson and Stolterman, 2012 p. 11). Whilst it is evident that graphic design emerged from the craft tradition, and design continues to be discussed in this context, the arguments presented by Nelson and Stolterman are persuasive. In the general context of design they deal with the difficulty graphic design continues to experience in terms of practice as form making rather than creative and critical thinking and their role in terms of the social responsibility of design. In order to consider this perspective on the actual practice of design it is helpful to understand specifically what activities designers engage with when responding to client briefs.

What do Graphic Designers do?

Stated simply in terms of the physical act of making, graphic designers choose existing or create their own marks and arrange them within a given format to convey a concept in response to a client brief (Hollis, 2001, p.7). For example, the printed page, a piece of packaging, a digital web page. The intention is to provide some kind of order to information, form to ideas, and expression and feeling to a variety of artefacts that document human experience. In addition, due in part to the corporatisation of culture that has affected many professions, Shaughnessy (2010, p. 28) argues that the contemporary designer is also required to be a diplomat, business thinker, researcher, aesthete, innovator and ethicist. However, there has never been greater need for clear and imaginative visual communications that will relate people to their cultural, economic, and social lives. Designers, as manipulators of images and messages, have an obligation to contribute meaningfully to a public understanding of the social value of design (Meggs, 1998 p. 475).

Graphic design activities today can include for example, entrepreneurship (especially in the digital realm), publishing, moviemaking, typeface design, and the design of apps. Bearing in mind the designer's input is crucial to the success of most commercial activities, Shaughnessy (2010, p. 118) argues it is surprising that more designers have yet to realise the importance of the role they play. For example, it is difficult to imagine the company Apple without the input of the product designer Jonathan Ive or the graphic designer Susan Kare.

Contemporary graphic design practice is diverse with designers working in teams to address for example, consumer awareness, service and information systems, social problems, and business challenges. In industry collaboration is the norm with designers working alongside clients, co-workers, users, and audiences of their work. However, Ellen Lupton (2011, p. 4) recognises that graphic designers also work individually to "*develop their own visual languages through the creative use of tools and ideation techniques*". (This will be discussed later in the chapter). Ideation invariably involves capturing ideas visually through the use of techniques such as making sketches, compiling lists, diagramming relationships, and mapping webs of associations. Designers of products, systems, and interfaces for example, use a narrative storyboard to explain how goods and services function (Lupton, 2011 p. 5). In his book *The Back of the Napkin* Dan Roam (2012) explains that each ideation technique is a form of graphic expression. The use of ideation techniques and creative tools within graphic design will be discussed in more detail in Chapters Five and Six. Lupton (2011, p. 4) asserts that the graphic design process consists of three main phases of activity: defining the problem/confirming the client brief, generating ideas, and creating form. Significantly, all three phases have the potential for creative insight.

Defining the Creative Brief

Most, but not all, design projects begin with the need to solve a problem such as creating a logo, designing a brochure or a website etc. However, a design problem does not simply relate to the visual attractiveness of a solution in terms of form making or styling. It might also include for example, how to 'grow' customers or users through engaging and user-friendly interfaces in terms of digital media or

information systems in public spaces. In order to respond to this kind of problem graphic designers must engage in critical thinking and engage with a wider knowledge base, often outside their own, that will enable them to creatively respond to the challenge posed. This requires designers to have a skillset that will enable them to engage with for example, market research, marketing communication principles, user interface systems and usability studies etc. It requires analytical skills beyond the immediate form making and visual styling issues commonly associated with design practice. In this context creativity may result in for example, a better way for users to navigate their way around a building or location due to clarity in terms of signage and route instructions as well as being visually engaging and as such results in socially useful design.

Clients invariably supply an initial brief for consideration which designers use as the starting point for discussion however they usually refine this brief by conducting their own research and evaluation. Clients often consider design briefs too narrowly requesting for example, a brochure or poster. However, on closer consideration designers may recommend that a website or a PR campaign might better achieve their objectives. By combining the designer's research and the feedback from the client the creative team is more likely to generate effective and focused creative solutions. The majority of participants from the graphic design survey confirmed that defining the creative brief is a significant part of the design process as the most successful projects invariably develop from well-considered and concise creative briefs. Briefs are jointly authored by both the designer and the client and comprise of a written statement of objectives or goals for the given project. Lupton (2011, p. 56) and Shaughnessy (2010, p. 114) confirm therefore that the creative brief also serves as a checklist for evaluating the work as it progresses. During the early phases of the creative process designers employ a variety of techniques to help define and question the problem or brief. Lupton (2011, p. 15) explains these include methods such as brainstorming and mind mapping in order to generate initial ideas. They also include research such as interviewing, focus groups and brand mapping etc. that define the brief or problem in terms of what the end user wants or to confirm what has been done before. Shaughnessy (2010, p. 114) argues that interrogating the client brief is paramount. Designers risk being compliant and submissive in their response if they don't 'own' the content of the brief. He cautions that compliance and submission are

not conducive to creativity and as qualities lead to mediocrity in design terms. Instead, he suggests that designers should adopt a sceptical, questioning attitude, regarding the information supplied by the client and be wary of conventional wisdom. Participant 8 from the graphic design survey, an Academic/Industry Practitioner, agrees and stated that "*one of the most contentious elements of the design process is by how much should the designer allow the client to influence them? It is a truism that most clients are… unable to appreciate a lateral solution to the brief".* Professional creative practitioners interrogate client briefs as a matter of course however, this is a skill that is invariably learned by designers rather than the norm or one that is generally taught in design schools.

Shaughnessy (2010, p.118) argues that designers who have the confidence in their ability to think, write and generate their own ideas rather than accepting the client brief unchallenged have contributed significantly towards graphic design becoming a more valued profession. Recognising the importance of critical thinking skills in support of creativity significantly increases the designer's abilities in this area. Together with their digital capabilities and other skillsets, it challenges the old view of the designer as a passive artisan, technician or 'hired help'. Designers with these additional skillsets are more respected and valued by design agency creative directors, agency management and business clients. Promotion and salaries within an agency are commensurate with these additional skillsets.

Another valuable tool and skillset for the designer referred to earlier is 'design thinking'. Today designers use this ability to move beyond the traditional boundaries of graphic design. Design thinking has become fashionable in more progressive business circles and in a *New York Times* article, *Welcoming the New, Improving the Old*, Sarah Beckman (2009) discusses how the designer's tools of measurement and analysis have been used to drive business growth. She goes on to suggest that using the way designers think provides a new dimension to business thinking. In his book *The Design of Business: Why Design Thinking is the Next Competitive Advantage* Roger Martin (2009) argues that "*a person or organisation engaged in design thinking is seeking a balance between reliability and validity, between art and science, between intuition and analytics, and between exploration and exploitation*"

and in doing so is using the designers most important tool, – that of abductive[20] reasoning. Moving outside the traditional boundaries of graphic design requires designers to engage in multi-disciplinary activities and co-production both of which contribute to the earlier discussion regarding defining the conceptual space, boundaries and context in which design is conceived.

Developing Concepts

Once the brief/problem is defined and approved by the client the next phase of the design process takes place and concepts are developed. This includes communicating ideas within the creative team, clients and potential users and audiences. Initially design ideas in response to the client brief are many and varied however later in the design process these ideas are edited down to those that most clearly meet the brief and are likely to be successful. Designers often respond initially with a process of open-ended and playful research pushing ideas around and therefore visualising and testing each concept takes time. Shaughnessy, (2010, p. 114) and Ellen Lupton and Jennifer Cole Phillips (2015, p. 10) explain this may include list writing, sketching, collage, mapping the familiar territory around a brief, as well as exploring the unknown. The full skillset of the designer comes into play at this stage and is encapsulated by the response of Participant 21 from the graphic design survey, an Academic/Practitioner, who states the requirements as "*a broad visual and culturally informed creative cognitive ability and the skills to focus research to inform and develop the resultant original concepts is essential to ultimately produce the most effective design outcome".*

Creating Form

Presentation of initial concepts to the client usually leads to both the client and the designer narrowing down one or two 'viable' ideas that are subsequently further developed. Designers will then express these ideas visually. Physical and digital mock- ups are produced to help both designers and clients envision and evaluate the

[20] Abductive reasoning is akin to daily decision-making where an individual makes the best of the information at hand drawing conclusions with incomplete information.

proposed solution. These are presented to clients during formal presentations. Lupton (2011, p. 61) asserts that whilst the research and concept development are important in defining and clarifying the direction and goals for the brief, visually executing the idea is the crucial task of the designer. It is also the task many designers find the most enjoyable and believe is the true test of their creative abilities. Some designers see this form making as the real essence of what they do. The research and analysis produced at the preliminary stages of the design process are meaningless unless they are used to effect when developing the creative form making. The design process up until this stage is collaborative, however in responding to the creative brief and form making two different designers will interpret the solution in distinctly different ways based on their own perceptions, ability and personality or as discussed in Chapters Two and Three, their 'worldview'. Lupton (2011, p. 113) explains that creative teams are invariably put together to take advantage of this fact in order to present clients with more than one solution to choose from. The design process will be discussed further in Chapter Six, p. 227.

Key Visual Styles and Cultural Influences

Chapter Three confirmed that graphic design practice has been influenced significantly by visual styles and form produced at influential points throughout the twentieth century as a result of social, economic, political, and technological issues affecting culture at that time. Whilst other influences such as functionality were regarded as important, particularly in terms of text and legibility of type, creativity was not always recognised, understood, or discussed in other contexts. Until the late 1980s scholars and design writers invariably discussed practice in the context of form, functionality, and the influence of historical style. It was only in the 1990s that creativity became understood and discussed in other terms. Functionality was not as highly regarded as it had been in earlier times and the creative practice of design became more experimental in its form making. These visual styles and form making are discussed chronologically, and in more detail, below in order to map the development of the main visual styles that have influenced graphic design throughout the twentieth century and the key cultural influences that shaped them.

Modernism and the Language of Form

The first two decades of the twentieth century were a period of incredible change that radically affected all aspects of culture. Europe in particular saw the rise of democracy, socialism and communism and technology and scientific advances transformed commerce and industry. Meggs (1998, p. 231) explains that amidst these changes visual art and design experienced a series of creative revolutions that questioned its values and approaches to form making and its role in society and a number of Modern movements emerged at this time. While some had limited effect on graphic design, others including Cubism and Futurism, Dada and Surrealism, De Stijl, Suprematism, Constructivism, and Expressionism directly influenced the graphic language of form and visual communications. Graphic designers of the 1920s and 1930s embraced the Modernist ideals established by both the Bauhaus (Discussed in Chapter Three) and the Modern movements and for over two decades these styles and these ideals remained a major force within the discipline (Meggs, 1998 p. 231). They remain a significant influence on graphic design today.

However, whilst the Bauhaus is recognised within the discipline of design as an excellent school, Frascara (2001, p. 15) argues that it was "*culturally blind and intellectually empty*". He observes that the innovation it pursued lacked any social responsibility or cultural sensitivity. It did not value other aesthetics or acknowledge that different people have different needs. He asserts that this lack of cultural sensitivity was due in part to a lack of awareness of the importance of both content and context within design. This observation is significant because many design schools today still use the 'visual fundamentals' of Bauhaus thinking to underpin their programs and whilst the visual is an important and fundamental part of graphic design, as discussed earlier, it is only part of what constitutes design. Frascara (2001, p. 15) explains that if the purpose of design is to respond to needs, to assist with tasks, to promote goods, to aid instruction and to provide 'artefacts' that enable us to live the way we want to live design should not be considered or evaluated purely in terms of its visual aesthetic. Once design is considered as part of culture then the significance of content and context become apparent. For example, in order to produce good design in support of health education it is necessary to know a little about health and education and importantly a lot about the intended audience of the design.

The International Typographic Style

Due to the technological advances made after the Second World War, industrial production turned towards consumer goods and the outlook for the capitalist economic structure was expansion and prosperity. This led to a growth in internationalism and the emergence of multinational corporations. Meggs (1998, p. 363) asserts that corporations recognised prosperity and technological development were closely aligned voicing a need to develop a corporate image and visual identity that would be recognised across diverse global audiences. This internationalism required clarity of communication and multi-lingual formats and designers developed a new visual language to enable a global understanding of information. The International Typographic Style that emerged during the 1950s in Switzerland and Germany, and which evolved from De Stijl, the Bauhaus, and the new typography developed during the 1920s and 1930s, provided clarity and responded well to these needs. Its fundamental concepts and methodology became international in reach (Meggs, 1998 pp. 330-333).

Critics of the International Typographic Style argue its adherence to a formula; a mathematically constructed grid, sans serif typography, text ranged left, etc., results in a sameness of solution and a homogenised style. However, advocates of the style argue that it provides a purity of means and legibility of communication that enable the designer to achieve in their view a timeless perfection of form (Meggs, 1998 p. 320). Early pioneers of the style such as Josef Müller-Brockmann were not only concerned with the visual appearance of the work but also developed, through their design, writing, and teaching, an attitude that continues to influence the discipline to this day. Personal expression and eccentric solutions were rejected while more conventional and universal solutions using a more scientific approach to problem solving were embraced. Meggs (1998, pp. 330-333) explains that in this definition of design the designer does not engage in a creative role but is simply a conduit for disseminating information within society in a clear and ordered way. The multinational reach of many corporations made it difficult for them to maintain a cohesive identity however unifying all corporate communications into a consistent design provided a single consistent communication that could be used to project consistent corporate messages. The significance of using graphic design to build a reputation for quality and reliability was recognised. European pioneers within

graphic design at this time included for example, Peter Behrens at AEG and Giovanni Pintori at Olivetti working during the 1930s and 1940s whilst in the US during the 1950s and 1960s designers such as Paul Rand, Lester Beall and Saul Bass also embraced corporate identity and visual communications as major design activity (Meggs, 1998 p. 363-389). Anne Odling-Smee (2002, p. 8) asserts that unfortunately the international reach of much of this type of graphic communication, underpinned with both Modernism and the International Typographic Style, led to the growth of a homogenised 'style' in the visual appearance of most corporate communication. Due to its principles continuing to be taught in design programmes today it still influences design practice however there is recognition of its limitations, particularly in terms of creativity. For example, Participant 27 from the graphic design survey, an Academic Practitioner, argued that "*graphic designers might be tasked with merely styling, but the way that elements are combined benefits from considering new ideas and imagination in order to create more successful outcomes".* Equally, recognising that templated styles are not conducive to creativity, Participant 17, an Industry Practitioner, explained that *"poor examples of graphic design…are often formulaic, cliched and generally uncreative in their response to problem solving. By its nature, good graphic design has creativity at its heart".*

The Conceptual Image

Whilst Modernism and the International Typographic Style were being embraced by 'information' designers to meet the needs of the corporate multi-nationals Meggs (1998, pp. 390-413) identifies another significant development in graphic design emerged during the 1950s. The 'conceptual image' or 'big idea' as it is referred to in advertising, was being explored by designers such as Roman Cieslewicz working in Poland, Milton Glaser in the US, and Gunter Rambow in Germany. Images have the ability to convey not just narrative information, as in the traditional book illustration, but also concepts. The importance of the conceptual image developed in response to a variety of factors. These included the social and political commentary of the Polish and French poster designers, the civil rights movement in the US, and also the technological developments in printing, photography and the paper making processes that enabled better quality printing of coloured images (Meggs, 1998 p. 390; Odling-Smee, 2002 pp. 8-10). Graphic designers discovered that the conceptual

image could more effectively communicate the complexity of the political, social, and cultural ideas and emotions than the traditional narrative image. Frascara (2001, p. 14) suggests that recognition within graphic design of the importance of content and context evolved during this time. Political communications ceased to be the exclusive domain of governments and political parties with various groups in society becoming vocal within the public domain. This divergence within various groups led graphic designers to identify the need to tailor messages to different groups of people. Working alongside marketing communications specialists this has become a significant part of the strategy of graphic design communications today. Meggs (1998, p. 390) notes the conceptual image also provided graphic designers with greater potential for self-expression, creating more personal images, and pioneering individual styles and techniques. The traditional boundaries of practice observed in Chapter Three between fine art and graphic design became more fluid.

Postmodernism and Experimentalism

Modernism, the International Typographic Style, and the use of the conceptual image continued to influence the discipline of graphic design throughout the twentieth century. However, Meggs (1998, p. 432) and Hollis (2001, p. 186) assert that by the 1970s many considered the Modern era in art, design, politics and literature to be coming to an end. The cultural norms of Western society and the authority of traditional institutions were being questioned as the underlying principles of Modernism began to be disputed. The growing social, economic, and environmental awareness of the time left many graphic designers believing that the Modern aesthetic in design was no longer relevant in an emerging post-industrial society. These designers began to break with the International Typographic Style and to challenge the order and clarity of Modern design particularly in the area of corporate design. Unlike the work of Modernist designer's Postmodern design was often subjective and eccentric and dismantled the boundaries between the high and low culture discussed in Chapter Three. Heller (2005, p. 9) recognises it does not represent a style but a period of late twentieth century capitalism that significantly impacted upon graphic design during the 1980s. Initially it was considered by many designers to represent self-indulgence and a lack of discipline demonstrated through a variety of styles that had no unifying ideals or formal visual vocabularies.

However, Jeffery Keedy (1998) argues that it heralded a new way of thinking about design that instigated a new way of designing. Designers now realised that as mediators of culture they had a responsibility to society at large and could no longer hide behind the objective 'problem solving' associated with Modernism. Design practice embraced alternative forms of visual expression that ultimately led to the visual style becoming more heterogeneous in nature. These styles, termed the vernacular, pop culture, nostalgia, pastiche, deconstruction etc., saw more experimentation by designers. However, whilst Postmodernism is considered as experimental in nature certain themes and stylistic features are recognised as characteristic of Postmodern. These include recycling and appropriation rather than original creation, the eclectic mixing of styles, enthusiasm for technology and mass culture, and an emphasis on the ephemeral. It is the recycling and appropriation and the emphasis on the ephemeral rather than original creation that undermines the position of creativity in design practice today.

By the late twentieth century Modernism, the International Typographic Style, conceptual design, and Postmodernism coexisted influencing design activity globally. Meggs (1998, p. 414) explains that this expansion in international visual culture was given momentum due to developments in typography and printing that were enabled through digital technology and the rapid growth in graphic design education. The late twentieth century was also characterised by the global economy and instantaneous communications and the world as described by Marshall McLuhan became a 'global village'. This cultural and visual diversity created an environment where a global dialogue could coexist alongside national visions resulting in a pluralistic era for graphic design (Meggs, 1998 p. 414; Hollis, 2001 p. 179) and one that is still in play today with designers who refer to the 'glocalisation' of communications.

Digital Design as a Catalyst for Creativity

Electronic and computer technology advanced greatly during the latter part of the twentieth century transforming many areas of human activity (Meggs, 1998 p. 455). The discipline of graphic design in particular was irrevocably changed by the new and affordable digital computer hardware and software initiated primarily by three

companies. Apple Computer developed the Macintosh Computer; Adobe Systems invented the PostScript programming language that underpinned the page layout software and electronically generated typography, and Aldus PostScript enabled the design of pages on the computer screen. From the mid-1980s onwards designers became increasingly interested in the potential of computer-aided design as a catalyst for creativity and not simply as an efficient production tool. Odling-Smee (2002, p. 10) argues that the significance of the Macintosh computer and its associated software, in particular the colour capable Macintosh II, was due to its affordability through mass production and therefore its accessibility to individual graphic designers and the broader public. 'Wysiwyg' (what-you-see-is-what-you-get) user interfaces replaced the complex programming skills previously required to operate computer systems. These two factors coupled with an unprecedented expansion in graphic design education and professional activity in support of multinational corporations produced a discipline with vast numbers of trained practitioners. The number of individual designers and design agencies rose exponentially. However, these new icon-based interfaces empowered not only designers but also the broader public in the use of computers for design (Meggs, 1998 p. 455). This growth in 'desktop publishing'[21] began to erode the position of designers within the process of graphic communications due to the belief amongst both clients and the public that they could produce graphic design for themselves. This demystification of design due to the proliferation of 'do-it-yourself design' saw the devaluing of technical skills by both clients specifically and society generally. Together with the evolving cross-disciplinary nature of design in a multimedia and interactive media environment this led designers to an inevitable crisis of identity in which their role was under scrutiny.

Chapter Three observed that the Industrial Revolution had fragmented the design process into a series of specialised stages. Meggs (1998, p. 455) notes that this was further compounded during the 1960s when phototype became prevalent. Graphic designers at this time were only one of the skilled specialists required to take a visual communication concept through to finished print. Graphic designers created page

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[21] The term 'desktop publishing' was coined by Paul Brainerd, founder of the Aldus Corporation. Their software provided the new method of creating page layouts by electronically combining type and images on screen before printing them as a single unit on a page. SOURCE: www.ithistory.org.

layouts; typesetters operated text and display setting equipment, production artworkers pasted all the elements into position on a board, camera operators made photographic negatives of the artwork, repro artworkers assembled the negatives together, platemakers prepared the printing plates, and press operators ran the printing presses. The significance of the digital technology of the 1990s is that it enabled one person operating a desktop computer to control most of these functions in one process and the working practice of the graphic designer within the industry reverted back to a position whereby the designer controlled the whole process of design from concept to finished print (Meggs, 1998 p. 455). Although the new digital technology received strong resistance initially from many graphic designers, improvements in the operating systems and software eventually overcame this resistance. Designers eventually recognised that these systems empowered them by giving them greater control over the design (creative) and production processes. Meggs (1998, p. 445) and Odling-Smee (2002, p. 7) confirm that together with the rapid development of the Internet and the World Wide Web, digital graphic designers transformed both the way designers worked across disciplines and also the way people communicated and accessed information.

Odling-Smee (2002, p. 7) argues that the discipline of graphic design reflects how digital technology is moving forward. Designers have to remain current within all the associated technology in order to stay competitive meeting the technical needs of print and production whilst meeting the commercial demands placed on them by clients. Each new technological invention or development initiates a change in production methods that invariably leads to either a shift or change in visual style within graphic design as designers exploit the possibilities of the new technology. Odling-Smee (2002, p. 7) explains that this was the case at the end of the twentieth century. Changes in print technology and its effects on graphic design as a discipline, where the role of craft as a practical element of the production process was all but eliminated, were greater than they had ever been. The speed of technological development and the fact that software and hardware products become redundant very quickly means designers are continually facing new learning curves to update their software knowledge instead of spending their time, as they have done historically, perfecting an art or technique over a lifetime using the same medium (J.

A. Walker, S. Chaplin, 1997, p. 208). This has serious repercussions for the amount of time the designer can spend on creativity and ideation within the design process.

Although rejected initially by many designers, others embraced digital technology as an innovative tool capable of both expanding the scope and nature of design and the design process itself. The US designer April Greiman argued that using the new tools of graphic design to imitate what was already understood in terms of the language of graphic design – type and layout - was a backward step. Designers instead should use the freedom gained by the technology to focus on the creative ideas supporting the design. A significant number of art schools and university design education programmes became important centres for redefining graphic design and by the mid-1990s, the complexity of form, theoretical concerns, and computer manipulations found in the work of the early pioneers found their way into the mainstream of graphic communications (Meggs, 1998 pp. 459-461).

Collaboration and the Widening of Boundaries

The new digital technology created a revolution in image making and the boundaries between different creative disciplines became more fluid (Meggs, 1998 p. 469). For example, the merger of video and print technology unleashed new graphic design possibilities as well as expanding graphic design activity into new areas. However, the development and accessibility of the Apple Macintosh computer and its associated software also provided a platform for non-design specialists to engage in graphic communication activity. Designers found themselves competing against both computer programmers and the general public in the development of graphic communications. This will be discussed further in Chapter Five, p. 185.

The growth of the Internet and the World Wide Web during the late 1990s also widened the boundaries of graphic design with the development of websites and web content. Interactive media including hypertext (text that provides links to other texts in a non-linear way) combines audio, visual, and cinematic communications to form a coherent body of information that unlike some books or films (which present information in linear sequences) has a non-linear structure. The viewer can navigate the information on an individual basis making the interaction very personal. Interactive media developed the role of the individual designer into a specialism

working in collaboration with teams of other professionals including audio-visual specialists, authors, computer programmers, content specialists, directors, image-makers, and producers. Clement Mok, a creative director at Apple Computers, became an early advocate of the role of the graphic designer in the rapidly changing world of interactive media. He realised the digital revolution was merging commerce, technology, and design. He believed that design should not be defined as an isolated activity such as packaging or corporate communications but as an integral part of an organisations vision and strategy (Meggs, 1998 p. 473). Developments in digital technology throughout the 1990s changed all facets of the communications industry. Recognising the significance that strategy now played in graphic design and the importance of working across and within other associated disciplines the nature of communications, practice, and graphic design itself was redefined.

The tools used by designers continue to change with advances in technology however the fundamental role of graphic design, to give order to information, form to ideas and expression to artefacts, remains the same (Meggs, 1998 p. 475). Rob Dewey (1994, pp. 87-89) agrees adding that the essential role of graphic design is to connect message providers with the wider society. He argues that designers should embrace technological and cultural changes as an opportunity and not a threat. Definitions of graphic design should be widened to embrace the role as a mediator of meaning and in doing so should integrate all forms of the communication process (Dewey, 1994 p. 87). The need for clear and imaginative graphic communications that relate society to their cultural, economic, and social lives continues. As the creators of images and messages, graphic designers have an obligation to contribute meaningfully to societies understanding of for example, environmental and social issues that affect today's culture.

Design Practice in the 21st Century

Graphic design has increasingly become service led and can often be more about client liaison than creation. Clients have a much stronger preconception of what they want and due to their own abilities on the computer have a sense of how this might be achieved. Some participants in the graphic design survey confirmed that in this

environment they find themselves acting as technicians due to their technology and software expertise with clients acting the crucial role of creative director. Coupled with the speed in which they are required to work, they argued it leaves them with little opportunity or time for creativity. Hollis (2001, p. 10) explains this fast-paced environment perhaps understandably leads designers to be seduced by the proliferation of source material such as stock photography and illustration etc. and to the growing number of fonts available to them. The designer John Maeda observes:

> In the field of digital art an entire generation of creator's shop at the equivalent of home-improvement megastores, eagerly acquiring all kinds of prefabricated components and add-ons. Blissfully unaware – or even worse, uninterested in –the basic nature of the technologies they are using as tools. (Maeda, 2000)

An even greater concern within the graphic design industry today is the fact that many designers sift through design books and websites to source ideas rather than generate their own, a practice that became prevalent during the 1980s. This was equally encouraged by clients who would often attach the work of other designers to a creative brief with the instruction "*we want something like this*". The aim is to generate fashionable solutions but play safe by using ideas that have already been tested and proven to be successful. There is also an obvious cost saving to this approach in terms of speed in answering a brief and no requirement to fund research and development initiatives. However, Shaughnessy (2010, p. 119) explains there is a difference between sourcing and copying, which is an infringement of someone's copyright and amounts to stealing their work or ideas. He argues that good designers do not confuse sourcing and copying borrowing freely and adapting their sources in the same way that artists have always done in order to create something new.

Whilst many designers at the turn of the century were striving to keep up with new technology and the latest 'style' in design Odling-Smee (2002, pp. 12-13) observes there was also disillusionment and a growing awareness that computer-generated special effects often hide a lack of creativity. Equally, consumers (due to their proficiency with technology) recognised that low-quality content is often disguised with high levels of finish due to the use of software such as *PhotoShop*. In response, design companies such as the *Conran Group* in the UK began to change the visual style of their publications. For example, they replaced lavish production with more modest (visually and cost wise) publications as a gesture of sincerity towards

concerns for the environment. Odling-Smee (2002, pp. 12-13) argues that the growth in favour of handmade graphics over slick, computer-generated design may be due to growing consumer cynicism as individuality and uniqueness (defined as originality and therefore creativity in Chapter Two) become associated with the notion of trust. This notion of trust is linked to 'believability' and in a world increasingly hostile towards large brands is something that the corporate world is now focused on.

Increasing numbers of designers are now producing significantly more innovative work in recent years by creatively utilising technology from both the past and present. Odling-Smee (2002, pp. 16-17) argues that these designers have taken control of the future of computers within design by contributing their own ideas and by encouraging technology to develop in a more imaginative and human way. She argues that they are proving to be successful in this by stimulating their audience and reflecting reality with effective communication observing that in an increasingly uncertain cultural climate that advertisers and governments are already following this trend. What is encouraging for the practice of graphic design going forward is that the drive behind this development appears to be the search for creative concepts not a visual style. Participant 22 from the graphic design survey, an Academic, reinforces this view stating that "*graphic design practice is underpinned and shaped by imagination. The industry has advanced rapidly through automated design solutions. Imagination and creativity are the tools that will position designers apart from software led solutions.*

Creativity and Personal Expression in Graphic Design

Graphic design today is intensely competitive. Shaughnessy (2010, p. 13) asserts that designers are constrained by commercial restrictions into a state of timidity and compliance. It is easy to understand therefore why designers find it difficult to take a stand regarding the role of creativity in graphic design. This position remains unchanged. The graphic design survey confirmed that practitioners continue to debate the role of creativity in graphic design. Some practitioners consider graphic design a problem-solving business tool and that they should suppress their desire for creativity to ensure the effectiveness of the content. Others however, whilst acknowledging that design has a commercially driven problem-solving function,

confirm it also has a cultural and aesthetic dimension that is enhanced by creativity. Unfortunately, the survey confirmed the former is the dominant view. This view of the designer's role appears to be particular to graphic design. For example, architects and fashion designers are encouraged to express their creativity and society appears to value those designers who display creativity within their work the most. Shaughnessy (2010, p. 14) argues that this view does not have a basis in commercial reality as history repeatedly confirms that the messages that get noticed are the ones where creativity, including aesthetic creativity, is clearly present. It appears therefore that censorship of the role of creativity in graphic design is due to the views of the designer and not that of society or the commercial environment.

Shaughnessy (2010, p. 14) asserts that even designers who argue that the role of the designer is to serve the client still want to do this creatively. He cautions against the de-emphasis of the visual and aesthetic nature of design in favour of problem solving explaining that designers are people who instinctively see the world in visual terms (2010, p. 99). They are also educated and trained to consider the harmonious arrangement of visual material as their primary function. As such, they hold strong opinions regarding what looks good and what looks bad. As discussed in Chapter Two, Shaughnessy (2010, p. 99) believes that designers are hard wired to have opinions about things and they make decisions about good and bad design using an internal set of aesthetic codes and opinions using their worldview.

The recent trend towards discrediting design in terms of a purely visual aesthetic approach has its origins in the book *Design for the Real World* by Victor Papanek (1971). Papanek (1971) argued that aesthetics, or the surface impression of things, is only a small part of a designer's role and responsibility. However, Shaughnessy (2010, p. 99) argues that whilst it can be argued as Papanek does, that the aesthetic benefit of visual aesthetics has more to do with fashion, peer pressure and the psychological need to conform, it is still a fundamental human concern. Significantly, he asserts that utilising their skills and experience in visual aesthetics (craft) is one way that designers can create distance between themselves and the growing numbers of non-specialists who engage in graphic communications. Participant 24 from the graphic design survey, an Industry Practitioner, made the same argument stating "*there has been a massive evolution in design with no*

common understanding… as graphic design has had to take on technology designers now need to have a niche or specialism to stand out from the crowd".

Shaughnessy (2010, p. 7) defends the role and importance of visual aesthetics and form in graphic design and argues that the message is not always what matters. However, many designers and clients have difficulty with this view recognising only design that has a purpose or a concept behind it. Shaughnessy argues this is a shame as it invariably leads to dull design and sameness and uniformity of expression. He goes on to observe that truly great work is the product of an intuitive and visionary (a definition of creativity discussed in Chapter Two) approach arguing that the best way to communicate a message is to be different. In line with the *First Things First* manifesto, he argues that graphic design has both a cultural and aesthetic value beyond the promotion of commercial messages and is at its best when the voice of the designer is allowed to register. Dewey (1994, p. 88) agrees and argues that as design is holistic in nature, and that when done well is an integration of rigorous critical analysis and creative intuition (or imagination as defined in Chapter Two), graphic design should return to the importance of imagination. He asserts that in attempting to position itself as a profession imagination has been lost at the expense of analysis and argues that designers should reinstate the importance of creativity for its own sake. It is the loss of imagination and therefore creativity, together with the suggestion that design is somehow produced simply by having the right hardware and software, that has caused design to lose its value in the minds of clients and the wider society.

Designers today work in a variety of ways for a variety of reasons. Some produce exceptional form such as M/M in Paris and Mark Farrow in London, some emphasise the social role of design such as Jonathan Barnbrook and Nicholas Blechman, some such as John Maeda and Joachim Sauter blur the boundaries between design and technology, and some cross the art/design divide like Stefan Sagmeister and the Swiss group Benzin (Shaughnessy, 2010 p. 10). However, while contemporary graphic designers should be cognizant of all the issues discussed that affect today's culture in terms of economics, politics, and technology, Shaughnessy (2010 p. 10) argues they should also recognise it is their role to be visionary, imaginative and ultimately creative in response to these.

Conclusion

Graphic design practice is shaped by both changes in practice and the needs of society. Historically practice was considered as a decorative response to mass consumerism however, developments throughout the twentieth century raised questions regarding how graphic design was defined. Scholars today argue that graphic design has its own tradition and culture and approaches to learning and enquiry. Whilst craft skills remain an integral part of practice, design should be considered in terms of its relationship with the intellectual skills necessary to address the cultural issues affecting society today. Graphic design does not sit outside of the cultural context in which design is practiced and is therefore a major indicator and influencer of the continually developing culture in society. When done well it is an integration of creativity and rigorous critical analysis. In attempting to position itself as a profession creativity has been lost at the expense of analysis. It is the loss of creativity, together with the suggestion that design is somehow produced simply by having the right hardware and software, that has caused design to lose its value in the minds of clients and the wider society.

Designers are increasingly questioning their practice in terms of its usefulness to society, engaging with and responding to a range of issues. Equally, business organisations now recognise the value of design thinking as both a form of creativity and critical analysis. This has led to a dialogue within design practice regarding the viability and benefits of professionalising the discipline. Although the discipline is represented both nationally and internationally, the prevalent view is that graphic design cannot become an accredited profession due to its modus operandi, the diversity within practice and the fact that the tasks it performs are perceived as being within the general competence of everyone in society. However, due to its close alignment with the business community graphic design has adopted many of the attributes that characterise a profession, particularly in terms of its interaction with society and culture.

The demystification of graphic design due to digital technology, the devaluing of technical skills by both clients and society, and the cross-disciplinary nature of practice has led to a crisis of identity for designers in which their role is increasingly under scrutiny. However, the role of graphic design, to connect message providers

with the wider society, remains the same. Technology and changes in the nature of practice should be considered an opportunity not a threat. Definitions of graphic design should be widened to embrace the role as a mediator of meaning and in doing so integrate all forms of the communication process. Whilst many design practitioners are constrained by commercial restrictions, believing graphic design to be simply a problem-solving business tool, others are beginning to recognise that graphic design has a cultural and aesthetic dimension that is enhanced by creativity. The most recognised and celebrated design is invariably that which demonstrates creativity is present. The censorship of the role of creativity in graphic design therefore appears to be due to the views of individual practitioners rather than the commercial environment or the wider society.

Chapter 5 - Creativity and Graphic Design Education

Introduction

The twenty first century has seen continued rise in the growth of technology, economic activity, political instability, and environmental change. Governments have challenged design educationalists to address these issues and this poses fundamental questions for design education. Whilst many educationalists recognise the potential for design education to respond to these challenges the graphic design survey confirmed there is a lack of understanding regarding how or why it is necessary to make changes. Although design students are encouraged to engage with social, technological, and business behaviours they do so superficially and uncritically due to a lack of understanding of these other forms of knowledge and how they are acquired. In graphic design education focus is given to instilling the knowledge of the specific 'community of practice'. Once this academic community is established barriers are created in terms of seeing, learning and understanding other forms of skill and knowledge. These barriers are the result of long-term perceptions, attitudes and practices that hinder the exploitation of creative skills more fully. It is therefore necessary to question current perceptions in terms of accepted vocational and intellectual formation, how or why there is a shared understanding of how these are defined within design education, and whether they are fit for purpose.

The challenge for educationalists is how to sustain the value of current experiences alongside the knowledge, skills and understanding required to move between other communities of practice. Design education should provide students with both creative and critical abilities in order to respond intelligently, accommodate change, innovate, and adapt as the world changes. Students must have a greater appreciation of the context in which their creative skills will be applied and the ability to discuss projects with clients and colleagues in their own language. The design curriculum for the twenty first century therefore should not only focus on the development of content but on the ways in which knowledge is combined, evaluated, experienced, and applied in order to address the issues experienced today. This chapter considers developments in graphic design education within the UK, primarily throughout the twentieth century until the present day, and addresses the key issues that have

impacted upon education and training provision in terms of facilitating creativity and critical thinking within design education.

An Overview of Graphic Design Education in the UK

As observed in Chapters Three and Four formal design education in the UK has been provided through a variety of educational institutions since the mid-nineteenth century. Developing from the Victorian concern with the economic competitiveness of its manufactured goods, design education had its roots firmly in the Industrial Revolution. Contemporary design has an even greater link with business and industry however Lyon (2011, p. 8) explains that with the mass education and 'cultural industries' of twentieth century society, design education today is provided in different contexts and subject to different pressures. Allan Davis (1997, p. 4) provides a historical perspective of why this diversity has evolved. He attributes it to the expansion of disciplines and pedagogical differences, the disbandment of the Council for National Academic Awards (CNAA) in 1992, wider institutional changes such as modularity[22] and its attendant fragmentation of courses, and new quality and assessment demands. However, even with the increased diversity of disciplines, governance and wider institutional changes in design subjects, studio-based practice (the workshop model) and the use of assignments or projects (applied design) as a learning and assessment tool remain dominant features of graphic design learning and teaching.

During the twentieth century there was a conscious emphasis within education upon vocationally based learning which Dewey (2007 [1916], pp. 231-232, p. 228) attributes to a number of factors. Firstly, vocational occupations that provide tangible services to society are highly regarded. Secondly, industrial occupations have gained in importance with manufacturing and commerce no longer local and domestic but global. These industries direct many social activities leading to questions regarding the relationship between education and industry. Thirdly, industry today is technologically based therefore occupations have greater intellectual content and

[22] Modularity in higher education refers to a system by which degrees are obtained through the accumulation of credits. A module is a self-contained unit of teaching, learning and assessment that is worth a fixed amount of credit. Each module passed gains a set number of credits that count towards the degree.

larger cultural possibilities than in the past. The ensuing economic revolution requires solutions to problems based on greater intellectual capacity and creativity. There is therefore a demand for an education that provides graduates with intellectual problem-solving abilities, increased levels of creativity, and cultural understanding in support of their studies. In the context of design all craftsmen in the past were equal in their knowledge and outlook with personal knowledge and ingenuity being developed within a narrow range because their work was produced utilising tools under their direct command. Today, designers have to continually adjust themselves to the workings of tools that now lead both purpose and means of production. However, while the intellectual possibilities of industry have increased industrial conditions provide less of an educative resource than in the past. Fourth, the pursuit of knowledge has become more experimental and less dependent on tradition and is therefore less associated with dialectical methods of reasoning. As a result, industrial occupations provide more opportunity for familiarity with the method by which knowledge is made. Finally, advances in the psychology of learning align with the increasing importance of the relationship between industry and life and emphasise unlearned instincts such as exploration, experimentation, and experience. Dewey (2007 [1916], pp. 231-232) asserts that learning is not something ready-made that is recollected within the mind but the organisation within the mind of original capacities into purposeful outcomes. As observed in Chapter Two, this is also a definition of creativity. These factors have shaped the development and provision of design education throughout the twentieth century and continue to raise questions regarding the provision of education and the role of creativity within the discipline of graphic design.

Graphic Design Education within the Art School

Chapter Three confirmed that design education began with the traditions of craft training and apprenticeship which emphasised the importance of skilful making by hand, and where design was considered as inseparable from this type of physical activity. The craft tradition depended upon familiarity with materials, tools and techniques and was a cumulative body of methods, based on intellectual understanding and experience, enabling socially useful outcomes. However, Dewey (2007 [1916], p. 129) cautions there is a danger that these methods become

mechanised and rigid when there is an emphasis on mastering the skill rather than the power that skill provides for enabling these outcomes. Mastering methods is an important part of learning and in themselves these methods do not preclude individual initiative and originality (creativity) however Dewey (2007 [1916], p. 130) argues that the ability to use an established technique in a masterly way is no guarantee of creativity because creativity depends upon using this knowledge in some way. Knowledge of methods does not provide the solution to what to do in a given situation directly or provide a model to follow and as no two situations are the same, existing methods require adaptation in order to respond intelligently to a given situation. Whilst recognised methods may suggest a way forward in terms of further enquiry, exploration, and what techniques to try they are only positions from which to continue exploration and not an end in themselves. The personal attitudes and perspectives (worldview) of the individual dealing with a situation are not subordinate to the principles and method of the tradition but are facilitated and directed by them. As such the act of creativity can only ever be facilitated and not taught. In education 'methods' should be considered as intellectual aids or resources that support individual responses to individual experiences rather than as an end in themselves. This is where their educational value lies (Dewey, 2007 [1916], p. 130). Most of the Academic Practitioners in the graphic design survey concurred with this view however there were several who believed that creativity was a process that could be taught. For example, Participant 2 explained "*It's our job to teach the process of being creative. We start with the basics of research, sketching, brainstorms and then add craft skills - how to use Photoshop, render artworks etc".* The emphasis is on the process not the outcome or value of its intended use.

Lyon (2011, p. 47) identifies that elements of the craft tradition came into UK Art Schools during the nineteenth century as a response to government concerns that British industrial design lacked the quality and economic competitiveness of European design. For example, the Government School of Design (1837) later to become the Royal College of Art, and Brighton School of Art (1859). However, there were demarcations between what was considered appropriate to a design education as opposed to fine art education. As observed in Chapter Three, this distinction can be traced back to the Age of Enlightenment when craft began to be seen as distinct from 'art', the latter becoming more associated with intellectual skill.

As such, the design education provided became associated with skills training in support of the needs of industry and provided the model from which design education has developed today. Lyon (2011, p. 47) observes that the teaching of design in this period did not revolve around the development of creative self-expression or around materials practice and experimentation.

This model of the Art School continued during the early part of the twentieth century and it wasn't until the 1960s with the introduction of a new type of degree-equivalent award, the Diploma in Art and Design, that considerable changes to the established methods and approaches to design education were created. These changes were a response to the conclusions of the government-commissioned *Coldstream Report* that suggested both art and design courses should provide a liberal education in art (National Advisory Council on Art Education, 1960). Significantly, these changes were aimed at encouraging experimentation, (creativity) in media and materials and increasing the 'intellectual' core of art and design education through the study of art history and complementary studies.

The alignment of art and design education with other higher education subjects culminated in the Diploma in Art and Design becoming a Bachelor of Arts. By the end of the 1960s Art Schools began to be merged into Polytechnics and by 1992 Polytechnics were permitted to apply for University status enabling them, rather than the CNAA, to award their own degrees. Design education, combining elements of creative practice, history and theoretical context, continued to be developed during this time. Jonathan Woodham (2009, pp. 149-152) explains that the introduction of text-based study into design practice introduced a more abstract form of academic knowledge and a different tradition of learning by comparison with practice-based design. Initially the historical and critical elements were largely taught by lecture and were a significant contrast with learning in practice-based design (Clive Cazeaux, 1999 pp. 26-31). The distance between the two traditions of learning is still evident in design education today with different critical paradigms being used within academic study and practice-based design, often to the detriment of design students

who in the main gravitate towards a practice-based learning style[23] rather than an academic, theoretical one.

Changes in the understanding of how students learn have been gradually acknowledged and expressed in the educational philosophies influencing design educators and institutions of tertiary education. For example, Dewey (2007, [1916] pp. 54-62) argues that a student's ability to make their own connections is critical to learning (and creativity as observed in Chapter Two). These changes have moved from a belief in the authority of the teacher's knowledge and their ability to 'transfer' or 'transmit' this knowledge to a recognition of the vital role of the student in creating meaning and understanding, of being aware of how to learn, and ultimately engage with their own creativity[24]. Significantly, Dewey (2007, [1916] p. 11, pp. 103-105, p. 120) argues that the role and value of creativity is in its use as an instrument for getting results or providing an outcome. Learning he argues should therefore be practical and relevant rather than only theoretical and education should equip students to take a full and active part in shaping both their future and that of society. Design educators today are aware of the importance for students of participating actively in their own education. Students develop understanding as they engage in a range of activities and then use this experience to add to and develop what they already know. They are considered to benefit from being able to explore resources and lines of enquiry both independently and with expert guidance and from the ability to pursue their own interests, use their imagination, and to experiment with the knowledge they acquire (Lyon, 2011 p. 9). As argued in Chapter Two, all these activities engender and facilitate creativity. Engaging the imagination is the only thing that makes an activity more than mechanical, neglecting it leads to methods that reduce instruction to an unimaginative acquiring of specialised skill and the amassing of information (Dewey, 2007 [1916], p. 176). Education has also been influenced by the idea that learning is both personal and social and is affected

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[23] Learning styles refer to a range of competing and contested theories regarding differences in how individuals learn. Popularised during the 1970s the theories propose that everyone can be classified according to their style of learning with the premise that individuals differ in how they learn.

[24] John Dewey is considered the leading proponent of 'learning through experience' rather than learning through passively receiving. Dewey believed that every learner was active, inquisitive and wanted to explore and argued that educationalists should capitalise on these drives. SOURCE: Dewey, J. (2007) [1916] *Democracy and Education*. Middlesex: Echo Library.

by a range of environmental and contextual factors. Lyon (2011, p. 47) suggests that design education in particular addresses this by considering the kind of spaces people learn in, what informal networks learners can make use of, experiences of visiting museums and galleries, and work placement in professional design agencies and studios. All the practitioners in the graphic design survey emphasised the importance of engaging with industry and the value of work placements both in terms of the process of being creative and in terms of acquiring valuable professional skills.

Moving from Vocational to Academic Learning

Writing in 1988, Bierut (1994, p. 215) observes that a typical design portfolio could include subjects as diverse as pharmaceuticals, financial services, sport and leisure, fashion and food. This alone argues for the necessity of the graphic designer to know a little about society and consumer culture or at least have the ability to acquire knowledge and understanding quickly and apply it. Dewey (2007 [1916], pp. 120-121) asserts that knowledge in the sense of information is working capital. As such it is an indispensable resource for further enquiry and learning and therefore engendering creativity. Making connections in terms of thinking in relation to knowledge already acquired results in ideas (See Margaret Boden, Chapter Two, p. 13). Whilst knowledge might provide a suggestion for a solution, only by considering its specific application can its appropriateness be determined. Dewey (2007 [1916], pp. 120-121) argues therefore that originality (creativity) lies not in established knowledge but the use to which these familiar connections are put by being introduced into a further context. As discussed in Chapter Two, creativity is the putting together of everyday things to use in a context which has not been considered by others. It is the activity of thinking and not the materials from which it is constructed that is creative. However, Dewey (2007 [1916], p. 119) explains that in order to think effectively students must be given the opportunity to have experiences that will provide them with the resources to consider and work with the issue or problem at hand. He is arguing in favour of a more liberal as opposed to a purely vocational education.

As observed in Chapter Two, liberal culture was linked historically to fine art practice and the notions of leisure, purely contemplative knowledge and a spiritual activity that did not involve any physical activity such as making. More recently, culture has become associated with a purely private refinement, cultivation of certain states of consciousness, separate from either social direction or service. These philosophies are so deeply entrenched that the meaning of vocational by contrast has come to be generally understood as a form of education that centres on narrow and practical application of knowledge and methods that are focused primarily on industry. However, as argued in Chapter Two, Dewey (2007 [1916], p. 226, p. 235) believes its real meaning is a direction of life activities that are significant to the individual and useful to others in society. Vocation in educational terms therefore considers the connection between thought and action, individual conscious development with associated life, and theoretical culture with practical behaviour leading to some form of purposeful outcome. Vocational education should not be considered as the theory and practice of trade education and a means of securing technical efficiency in specialised pursuits. Instead, Dewey (2007 [1916], pp. 233-234) asserts that an education which acknowledges the full intellectual and social meaning of a vocation should include theoretical and contextual instruction in order to provide understanding of both historical and contemporary social concerns, problem solving to develop critical thinking and initiative in dealing with materials and methods of production, and study that would introduce students to the issues of the day. Significantly, it would develop the ability to adapt to changing conditions to enable designers to remain current within their chosen occupation. This definition of the meaning of vocation appears to have been lost in contemporary tertiary education where the emphasis is on skills training at the expense of intellectual and critical enquiry. Whilst many practitioners within the graphic design survey acknowledged the benefit of a broad liberal grounding within the student experience others explained that skills training generally took precedence. This is problematic as Bierut (1994, p. 215) argues that the pioneering work from the self-taught designers from the 1940s through to the 1960s for example, Otl Aicher, Alan Fletcher, and Paul Rand, is due to the fact that they were out of necessity well-rounded intellectually with their work drawing its power from a knowledge and deep understanding of the culture of the day. Dewey (2007 [1916], p. 9) argues that culture itself educates. It enlightens experience, it stimulates and enriches

imagination (creativity) and it creates vividness in thinking and execution. Educationally therefore the learning environment should favour learning in the sense of discovery rather than generating a mental store of knowledge and methods provided by others. Dewey (2007 [1916], p. 122) explains that when an idea or thought is given to another it becomes a fact and not an idea. Only by engaging with the conditions of a problem first-hand do individuals think for themselves. Passivity in education therefore does not lead to thinking and a lack of thinking results in a lack of ideas that in turn results in a lack of creativity.

By contrast, Bierut (1994, p. 217) asserts that most of the mediocre design of the 1980s was due to designers faithfully replicating what they were formally taught in design schools. This was based on mechanical skills instruction and models that promoted objectivity (see Chapter Four and the discussion regarding design styles, p. 109) requiring the designer to work outside of the culture of the day. Design work from the 1980s, he argues, looks increasingly dated and irrelevant because it is essentially value-free. Every problem had a purely visual solution that existed outside any cultural context. As discussed earlier, it is the imposition of methods, rather than individual thinking and creativity in terms of directed action, that leads to mediocrity in solution. Bierut (1994, p. 217) was concerned by the lack of educational diversity within the curriculum in favour of methods training in either a 'Swiss style' of graphic communication, a development from the International Typographic Style, or a 'slick' style where students were encouraged in gaining a 'professionally slick' portfolio. Both styles were valued for the way that graphic design looked rather than what it said. Educational programmes paid lip service to meaning in design with references to 'semiotics' (Swiss) or 'conceptual problem-solving' (slick), but they were applied in a cultural vacuum. Bierut (1994, pp. 216-217) observes that it was possible to study graphic design without any meaningful exposure to the fine arts, literature, science, history, politics or any other discipline that unite society in a common culture. He explains that the deficiencies in this typical design education are not a problem at first as new graduates are generally hired for their technical skills. However, several years later when exposed to more complex tasks and client requirements new designers find there is a need to have a broader understanding of the world their clients operate within if only to enable them to communicate intelligibly with their clients and intended final audiences.

Writing a decade later Swanson (1997, p. 68) affirms that this position was unchanged. He argues that the majority of design programmes were at least in concept vocational training programmes based on the Bauhaus model (this will be discussed later in the chapter). With the economic boom of the 1980s, and society's growing awareness of graphic design due to increased consumerism and growth in social and digital media, graphic design had become a desirable profession[25]. However, Swanson (1997, p. 69) observed that graphic design was a victim of its own success with more graduates than jobs available. This has ultimately led toward the entrenchment of professional training with each educational institution attempting to provide better entry-level job skills so that its graduates will have the best opportunity in what is now a very competitive job market. This continues to be the case today. All the practitioners within the graphic design survey confirmed the importance of professional skills training within the curriculum.

However, Swanson (1997, pp. 69-70) had argued for a return to the vocational education described earlier by Dewey observing that graphic design education should be considered as an intellectual rather than a purely applied art. He asserts that vocationally based disciplines (graphic design) should be undertaken for their intrinsic value to society and not merely to earn a living. As discussed in Chapter Three, Swanson (1997, pp. 69-70) and Dewey (2007, [1916], p.187-189) argue that the development of reason, moral grounding, and pursuit of truth have been considered virtues that are central to the concept of citizenship since the time of Aristotle. The questions raised by design writers today surrounding the role of the graphic designer within society and the responsibility towards their audience would equally suggest the benefit of a more liberal design education and therefore better prepare graduates for professional practice.

Although some academic subjects may have specific careers in mind, in the main they assume that education provides preparation for life as well as vocation. By contrast, Swanson (1997, p. 70) argues that graphic design students who do not make a career in graphic design or a related field may experience difficulty in working in other areas because their vocational training did not provide them with broader life

[25] In this context the term 'profession' is used to denote paid work rather than an unpaid amateur. Graphic design as an accredited profession is discussed in more depth in Chapter Four.

skills. Dewey (2007 [1916], pp. 191-192) explains that when the sole aim of education is to provide mechanical skills in the service of utility it sacrifices the development of the imagination discussed earlier, the refining of taste and the deepening of intellectual insight (cultural values) rendering what is learned limited in its use. Narrow modes of skill cannot be made useful beyond themselves. Swanson (1997, p.70) argues therefore that whilst the tools required for analysis and insight of many academic disciplines have broad extra disciplinary applications for understanding the world there is little in the education of a graphic designer that prepares them for life or a career other than design. He suggests that on the whole, design programmes do not help students become broader thinking individuals who can help shape their society. Dewey (2007 [1916], p. 179) explains that study of a subject should be appreciated for its own sake and in doing so will have the capacity to become a resource for other ends. Only when studies are considered as a means to something beyond themselves can their real value be determined. For example, graphic design may be commercial, an aid to the successful conduct of business, or philanthropic providing a service to society. However, the current tools of the graphic designer do not appear to serve much purpose beyond a career in graphic design. Swanson (1997, p.71) argues therefore that graphic design education is not in the main education but mechanical skills training. This point is generally recognised in educational programmes in graphic design today. Participants from the graphic design survey confirmed the design curriculum generally reflects the need for training and education in transferable skills that encompass lifelong learning, global citizenship, teamwork, professional and discipline expertise and reflective and critical thinking. However, the isolation of subject matter from its social context and the designer from other specialist areas for example, marketing, psychology and ethics, is the main obstruction in current practice to securing a broad general development of intellectual skills and creative ideation abilities that would lead to a vocational occupation in the real sense of the word.

Whilst the case for a more liberal education for design students is strong even influential design teachers have argued against it in favour of a purely mechanical approach. Paul Rand observed that both teachers and students consider ‘academic’

classes as time taken away from their true purpose – the design studio[26]. S. E. McKenna (1999, p. 74) reaffirms this position observing that there is a widely held belief in design education that theory gets in the way of practice. Unfortunately, this view continues in some institutions today. Whilst Universities promote life and practice skills as an aid to securing employment in order to attract students, embedding them in the curriculum is largely down to the academics. They often consider them a 'bolt on' to be accommodated rather than part of the main educational experience of the student learner. However, as argued earlier, knowledge and cultural context is critical to design, especially in terms of creative ideation, and therefore cannot be considered as having nothing directly to do with design.

Today there continues to be two types of education, liberal (academic/intellectual) and vocational (applied/mechanical) and they polarise the separation between culture and utility experienced within design education. Dewey (2007 [1916], p. 191) asserts that the idea that a truly liberal/cultural education cannot have anything in common with industry is still prevalent. The result is an educational system in which both cultural and utilitarian subjects co-exist with the former not considered socially serviceable and the latter not entirely liberated through imagination or critical thinking. However, today there is an intermingling of both within graphic design with the liberal being assigned to elements involved in learning and teaching methods and utility being assigned to the motives underpinning study. For example, Participant 4 from the graphic design survey, an Academic, confirmed *"some briefs are more academic such as 'what does it mean to be a human now?' and some are more industry led 'how can we get younger people to drink Martini? - a brief from this year's D&AD competition".*

Graphic Design Teaching Models

McCoy (2005, [1997], p. 4) observes there have been few models to follow in the development of graphic design education and according to James Davis (2008, p. 24), there is currently no single theoretical model of learning and teaching upon which design is based. Instead, design pedagogy draws upon a small number of

[26] SOURCE: Paul Rand (1993) *Design, Form, and Chaos*, New Haven, Conn: Yale University Press, p 217.

existing models and theories of learning and these are considered within this section. There are several factors that have driven diversity in approach. These include the variety of occupational subsets within design for example, graphic design, multimedia design, advertising design and also the fields of specialisation within the discipline, for example, editorial design, branded packaging, information design.

The Atelier Model

McCoy (2005, [1997], p. 5) asserts that before the twentieth century, when the Industrial Revolution's division of labour had separated creative ideation from production (see Chapter Three, p. 15), the European print shop apprenticeships were the only models of design education or training. This 'atelier' model approximated a small 'school' setting where students emulated the master and reiterated the traditional rules associated with the discipline. McCoy (2005, [1997], p. 5) explains that this was the imitation of the 'professional practice' of the day where students practiced until they acquired the skills of the master. In smaller ateliers, students contributed more like apprentices by contributing to the more mechanical and mundane aspects of the master's professional projects. This approach to learning tended to be tacit and observational in style. Lyon (2011, p. 44) and Richard Sennett (2009, p. 182) confirm that skills and knowledge were transferred through looking, making and replicating. This remains the model currently followed in industry where design graduates are employed initially to complete the more mundane, often software led, tasks while the creative directors and senior designers engage in creative ideation, critical thinking and problem solving.

The Bauhaus Model

The Bauhaus School is generally recognised as the first proponent of design education as we understand it today and considered a seminal model within most Western European schools of design. The arts were treated holistically with an emphasis on skills development and training. The school attempted through design, which was viewed as a vehicle for social change and cultural revitalisation, to form a closer link between art and society. It created a viable, modern, approach to visual education and its class preparation and teaching methods made a significant contribution to today's visual theory (Meggs, 1998 pp. 278-299). Whilst the Bauhaus

School continued to use the master/apprenticeship workshop model McCoy (2005, [1997], p. 5) explains it revolutionised design education by attempting to apply the Modernist ideals of abstraction and experimentation to a system of design education fundamentals that were suitable for the new industrial era. The objectives were to release the creative abilities of each student by developing an understanding of the physical nature of materials and to demonstrate that the fundamental principles of design underlie all visual art. Interestingly in terms of how students are taught today, Lyon (2011, p. 47) argues this was linked with ideas about placing the student learner at the centre of their education, emphasising their role in constructing knowledge through a process of making things. Through the methodology of 'direct experience' the Bauhaus sought to develop perceptual awareness, intellectual abilities, and emotional experiences (Meggs, 1998, p. 279). McCoy (2005, [1997], p. 5) explains that the Bauhaus Basic Course, or 'design fundamentals' as it is more commonly referred to today, was the first attempt in design education to suggest that basic design principles underlie all the design disciplines. It argued that design education should begin with abstract problems to introduce students to these universal principles before they engage with design problems aimed at the specific needs associated with applied design. Participant 27 from the graphic design survey, an Academic Practitioner, confirmed this principle is still generally applied and argued that students should work initially on briefs that do not have industry restrictions to enable them to make space to develop their creativity. Whilst applied design education today is the norm in graphic design, the Bauhaus 'design fundamentals' are still used in most design programmes within the UK, US, and Western European curriculum at some level (McCoy, 2005 [1997], p. 5).

Although the Bauhaus had, and still has its critics (See Chapter Four, p. 20), Lyon (2011, p. 47) argues it demonstrated that design could involve not only craft (making) skills but also creative ideation and critical thinking skills and taking advantage of the possibilities of technology in the service of society. However, whilst its practical teaching methods had profound impact its failure to address real world issues in society cannot be overlooked. Dietmar R.Winkler (1994, [1990], p. 39) asserts that the Bauhaus did not hold deep or discriminating opinions about the social content of its ideas or the purpose and impact of its design philosophy on the lives of consumers and audiences. It condemned the intellectual components of

academic education in the arts and allowed only intellectual activities around the development of the language of form, colour, image and the construction of artefacts taken from art movements such as, Futurism, De Stijl, and Dada. This anti-intellectual bias was imposed on studio-based, vocational education and in doing so restricted the model for design education for the future. Winkler suggests (1994, [1990], p. 39) that both staff and students were ill informed on the politics of the time and critically ignorant in their knowledge of current movements in literature, philosophy, and behavioural and social sciences. Although their rhetoric proclaimed better goods or living conditions, the consumer public had little opportunity to influence or shape Bauhaus ideology.

Ultimately, Winkler (1994, [1990], p. 39) argues that the Bauhaus assertion that one approach could resolve most problems demonstrates the naivety of their belief that all segments of culture and society can or should function in the same way and within the same value system. Designers at that time continued to take the stance of 'objective aloofness' in terms of the political, social and moral issues of the day and in the main had no discriminatory opinions regarding the content, purpose, and impact of communication messages on audiences, users and consumers. Due to the adoption of the Bauhaus teachings its narrow anti-intellectual bias and vocational training model still impacts on design education today.

Modernist Models

The educational imperatives of the Bauhaus, the Modernist ideals of De Stijl and Constructivism and the influential International Typographic Style were major forces within graphic design and significantly influenced design education from the early 1950s (See Chapter Four, pp. 20-21). Unlike the Bauhaus teachings however, and as a reflection of the design imperatives of the day, Meggs (1998 pp. 320-330) explains that Modernist educational models, based on objectivity and rationalism, produced a method of teaching that was easy to communicate to students. They also provided a foundation for understanding visual design process and composition. This Modernist graphic aesthetic stressed the language of design and was neutral to content (Meggs, 1998 pp. 363-369; Odling-Smee, 2002 p. 8; McCoy, 1997 p. 7). Design education became more about learning a graphic style than developing individual expression.

Modernist design models have underpinned design practice, teaching and the curriculum up to the present day and they remain a significant component of graphic design education. However, whilst Participant 29 from the graphic design survey, an Academic/Practitioner, believes that imitating design constructs and styles still prevails within design education, Participant 8 confirms its shortcomings and weaknesses are becoming increasingly evident.

Wolfgang Weingart's impact on graphic design education

By the 1970's both design practitioners and academics schooled in the International Typographic Style began to step back from the formalism of the Modernist tradition. Meggs (1998, pp. 435-442) notes this opposition continued through the work and teaching of Wolfgang Weingart in Basle, Switzerland. Weingart began to question the absolute order, rules and ideology of the International Typographic Style that was becoming established into an academic style demonstrating a willingness to explore new form. Hollis (2001, p. 146) suggests Weingart recognised that in relying purely on its rigid purism and adherence to a grid structure the International Typographic Style exposed its own weaknesses risking both repetition and mediocrity. It was at this time that education began to lead rather than follow professional practice and the rules of the International Typographic Style were broken by the emergence of what was later termed 'postmodernism'. Heller, (2005, p. 9) explains that following the Bauhaus tradition of students working under the guidance of a master, Weingart's work was embraced by young designers working in Basle at that time including Dan Friedman, April Greiman and Willi Kunz and he was widely imitated especially in graphic design education. Heller (2005, p. 9) asserts these designer/educators had an independent and experimental attitude that was necessary to take graphic design into new areas. Their academic postmodernist approach provided a new model for a new generation of design students who went on to become the mainstream of professional practice. Hollis (2001, p. 200) argues that in moving graphic design away from the 'objective aloofness' of the International Typographic Style it is Weingart who moved graphic design, and by default design education, into the realm of creative personal expression.

Significantly in terms of professional practice Meggs (1998, pp. 435-442) notes that Weingart advocated that designers should return to the method of working employed by the early typographic printers. This included maintaining an involvement in all aspects of the design process from creative ideation through to final print to ensure the realisation of their vision remained intact. As discussed in Chapter Four, the introduction of the Apple Macintosh computer in the 1980's reinforced this position due to the working nature of the technology. It was enthusiastically embraced by Weingart. However, Heller (2005, p.10) and Meggs (1998, pp. 435-442) confirm that with their work being recognised in graphic design magazines and annuals of the day it was clear that what was emerging was yet another visual style with no regard for the role of the designer and their relationship with society. It was throughout this period that the design curriculum lost the discussion regarding the role of creativity within graphic design and the responsibility of the designer within society.

Neville Brody: postmodernism in graphic design education

Hollis (2001, p.10) observes that by the 1980s postmodernism and the progress in digital technology was significantly changing the profession of graphic design and although most designers work as part of a team significant change is still associated with individual pioneers. The work of Neville Brody typified the major force behind postmodern design in the UK and graphic designers enjoyed a freedom to be intuitive and personal in their work without the stifling rigour of form that had dominated design before this time. However, as with designers in earlier decades, his style was copied and plagiarised throughout the 1980s and significantly impacted upon what was taught in design schools. Hollis (2001, p. 10) argues that even though new graphic form was emerging due to both commercial pressures and changing technology, the discipline and study of graphic design was still drawing off its own traditions with students simply emulating Brody's style. More recently, Brody (*Start the Week*, 2011) confirmed that graphic design still suffered from style over function with both industry and education engaged in pursuing the latest trend in design style at the expense of critical thinking and creative ideation. However, as observed in Chapter Four p. 20, Keedy (1998) suggests that from the late 1980s onwards designers began to recognise that as mediators of culture they had a responsibility to society at large and could no longer hide behind 'objective aloofness'. It was at this

time that the design curriculum began to include discussions regarding the role of the designer in society and design issues such as ethics, sustainability and corporate and social responsibility (Keedy, 1998).

Design education institutions of the day reflected both the experimentation of postmodernism and the discussions regarding the role of the designer in society in their design philosophy and curriculum with institutions diverging considerably in terms of what was included. For example, the London College of Printing (now London College of Communication) remained true to its craft heritage becoming a centre of excellence in the study of typography. Neville Brody is an alumnus. Wolverhampton Polytechnic (now Wolverhampton School of Art) represented a number of Polytechnics that converted to University status and was recognised for both printmaking and advertising design confirming its craft and vocational roots. Trevor Beatty is an alumnus. Ravensbourne School of Art (now Ravensbourne University London) continued to embrace Modernism and the International Typographic Style following the Bauhaus imperatives in the development of craft principles and design for society. Teaching at Ravensbourne during the early 1980s, the designer Geoff White was a signatory of the 1964 *First Things First Manifesto* and later the 2001 *First Things First Revisited* (See Chapter Four, p.10).

Graphic design education today reflects all or some of these models to some degree depending on the design institution concerned and particularly the background and education of its academic staff. However, the graphic design curriculum is weighted towards commercialism and acquiring professional practice skills with little discourse regarding the designer's role in society or the role of creativity within design. Whilst design briefs may for example, be explored around the theme of sustainability or ethical sourcing, they are invariably evaluated from the perspective of their commercial success rather than their social impact. The graphic design survey supports the idea that creativity itself is not addressed directly and as it cannot be taught or assessed without difficulty is often understated within module learning objectives and outcomes (this will be discussed later in the chapter). With the advent of digital technology from the late 1980s onwards other issues have become more prevalent in the discussion regarding the content of the curriculum within graphic design education.

The Impact of Digital Technology on Graphic Design Education

As observed in Chapter Four, the single most significant influence on late twentieth century graphic design came with the advent of digital technology and the introduction of the Apple Macintosh computer in 1984. The significance was twofold: firstly, it changed the entire communications industry from exclusively print based media to multimedia both in terms of pre and post-production requirements and skills. This influenced the required skill set of the designer as software expertise became mandatory. Secondly, it changed the working practices of the designer as a consequence of the requirement to work across more diverse teams. This was due to the widening of boundaries within the discipline in terms of for example, web interface design or marketing led design initiatives.

Jonathan Baldwin and Lucienne Roberts (2006, p. 150) assert that graphic design before the introduction of the Apple Macintosh computer was a skilled but time-consuming practice that involved discrete teams of people all working within pre and post-production. Each role required a different skill set and different background training. The adoption of digital technology by the creative industries radically changed this by combining both the creative and production roles with the designer now responsible for all aspects of pre and post-production. This change in working practice was underpinned by the development of qualifications in graphic design that encouraged a greater emphasis on vocational training due in part to the widespread introduction of computing technologies into graphic design courses. Baldwin and Roberts (2006, p. 150) argue that this in turn led to the current focus on software skills training rather than theory, creativity, and critical thinking. The educational and technological focus moved from understanding and ensuring effectiveness to a focus on the slick visual styling discussed earlier by Bierut (1994, p. 217). This reinforced the view that graphic design was entirely about the style and visual appearance of something to the exclusion of everything else. With the advent of desktop publishing, it also reinforced the view that anyone with a computer, and the appropriate software, could be a graphic designer.

Wild, (2002, p. 137) identified that the introduction of digital technology signified a period of unprecedented change with design practitioners and educationalists asking if the profession was on the verge of a renaissance, because the business

environment appeared to be beginning to value the input of designers, or extinction, because public access to the same technology could ultimately lead to professionally trained designers becoming obsolete. The design profession was already in a state of confusion due to a number of issues that were already challenging designers. These included complex client problems due to the range of media that presented themselves such as print, internet, TV, film etc., complex audiences due to marketing demographics[27], segmentation[28] and globalisation, changes in practice with designers working in extended teams with experts from outside design, increase in research in support of design, and time pressure – exacerbated by the development of digital technology.

Wild, (2002, p. 139) explains that the acceleration and expansion of the range of technical possibilities affecting what designers do and the concern regarding what might happen if their skills failed to address digital media was severely affecting design practice and education. Initial observation was that using the computer demanded a return to traditional responsibilities in terms of production where editing, designing, printing, and distribution could be condensed into a simpler operation with a faster turnaround. This apparent trade off would allow designers increased creative control because they would have more time to spend on intellectual thinking and creative ideation. However, as discussed earlier, if the education of a graphic designer is primarily applied rather than liberal in nature educationalists are actually failing to educate designers to take advantage of this opportunity. Wild (2002, p. 143) and Lupton and Cole Phillips (2015, pp. 10-13) explain that whether intentional or not the issues of mastering digital technology overtook the time allocated for creativity and conceptual development in most design curricula. Both practitioners and educators were now distracted by the range of necessary skills that already greatly impacted the craft of the discipline. This included the growing number of software programmes to master in addition to all the

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[27] Marketing demographics are socioeconomic characteristics of a population expressed statistically, such as age, sex, education level, income level, marital status, occupation etc. SOURCE: http://www.businessdictionary.com/definition/demographic-factors.html

[28] Market segmentation is the process of defining and subdividing a large homogenous market into clearly identifiable segments with similar needs, wants, or demand characteristics. Its objective is to design a marketing strategy that precisely matches the expectations of customers in the targeted segment. SOURCE: http://www.businessdictionary.com/definition/market-segmentation.html

other mandated skills and techniques developing in industry. Many of the Practitioners in the graphic design survey confirmed this issue is still prevalent in graphic design education. Fundamentally, failure to engage in a more liberal education means that most designers have no insight into the meaning or social implications of their activities, lack creativity in response to these, and have no direct personal interest in them beyond payment for their work. The outcomes of their activities are client/employer led rather than directed by the designer. In effect, designers are skilling up to gain employment rather than to serve some useful social purpose.

The synthesising potential of the digital realm not only increases the problem of increased knowledge and skill but also encourages designers to engage in authorship and entrepreneurial independence. Both Wild (2002, p. 144) and the Academic Practitioners in the graphic design survey confirm this model is perpetuated in design curricula where students in the main engage in independent enquiry and practice. In industry however, greater skill and knowledge is not considered the sole responsibility of the designer but gained through work and communication with others outside the discipline of design. Wild (2002, p. 143) notes that designers today are invariably provided with projects that have already been strategised and are simply required to provide a visual styling. Whilst this conforms to the model of design for print it obviously contradicts the benefits of new media in breaking down barriers between form and content and ultimately reinforces the ongoing debate regarding graphic design as simply the application of form.

The graphic design survey suggests that many design educators argue for design students to have a strong liberal education to aid their cultural and social literacy in the context in which they work. They also argue for students to receive sufficient specialist skills training to enable them, if not to master their craft, to at least be employable. However, Wild (2002, p. 146) suggests that the balance between generalisation and specialisation has been completely overturned by the overwhelming issue of digital competence and the conviction that to acquire digital skills is the most important issue for design students. This premise is reinforced by a profession that generally hires graduates based on their software programme

knowledge and skill with the intention that they will take up the burden of technical competency from more experienced staff in support of short-term production needs.

With the expansion of the field of visual communication Wild argues (2002, p. 147) that it is necessary to rethink graphic design curricula and the balance between conceptual work and form giving. She asserts that it is possible to continue to teach graphic design as a sub speciality of design practice and provide an education that prepares students for work in the expanded field of media. However, she argues that to do so the conceptual aspects of communicating would more accurately identify graphic design as a specialty within a wider definition of design as a conceptual operation.

Whilst the challenges to design education posed by new media have huge potential for design, Wild (2002, p. 149) suggests that the price of participating may be the end of graphic design as it is currently understood. The generalisation of design education dedicated to new media carries the risk of a split between academia attempting to future proof the curriculum and practitioners still occupied with skill and technique and short-term business goals. Providing both a generalist and specialist education in the space of a three- year academic programme is a huge task. Responses from the Practitioners within the graphic design survey indicated that the debate regarding how much time should be dedicated to digital skills training and to what purpose is still an issue within contemporary design education. The dialogue continues regarding the impact of digital media on learning and teaching and there is no consensus regarding what or how this should be taught in higher education. What is clear however is that there is a general disagreement between academics and students regarding the level to which specialist digital skills training is embedded within the curriculum with students reacting to the perceived requirements of industry at the expense of a more liberal education.

Creative Conceptualists versus Digital Artisans

An interesting facet of the computer discussed by Bruinsma (2005 [1997], pp. 177 - 179) is that its architecture forces all users to follow the same method in handling digital information that is technically the same for everyone whether image, text or video etc. For students of graphic design this method is different to those of the craft

skills they have already learned. Creating designs on the computer therefore forces designers to work differently, to lose the craft of their discipline described earlier, in order to create in the same way as everyone else. Bruinsma (2005 [1997], p. 178) explains that on a computer the designer does not create information, either by the physical making of content based on craft skills or the creation of ideas by connecting knowledge and information in order to respond with purpose to a given situation. Instead, existing material is organised and edited. This method is the same for designers and non-designers requiring no design skill or creative engagement. Therefore, in the broad area of visual culture for example, graphic design, advertising, television, journalism, professionals from other disciplines, and non-professionals, everyone uses the computer as their main tool for conceptualising and design of their visual statements. In doing so they share a way of thinking conceptually in terms of ordering and editing information rather than creating something new.

Bruinsma (2005 [1997], p. 178) asserts that graphic designers are excellent communication generalists capable of managing any formal aspect of the communications process regardless of the medium for which it is intended. However, he argues that designers need to rethink their role in multimedia communication because their traditional role as an autonomous professional who provides form to the work of other professionals has become redundant. For example, in digital media, any formal decision has a direct effect on the contents that are being communicated. The designer has become co-author and co-editor of the message. Therefore, the main contribution of the designer in the age of digital media is "conceptual functionalism" rather than "formal virtuosity" with designers exercising their role as critical thinkers rather than digital artisans.

He recommends that design education should follow the architectural model of the 'universal designer' where all aspects that touch on the design process require the designer to have a broad understanding of creative, social, communicative, and technical processes. He argues that although the design industry needs specialists such as Apple Macintosh operators, computer programmers, image manipulators etc. there is a greater need for designers who are able to see the bigger picture and know enough about each specialism to direct their activities. These designers are not

necessarily the same ones who execute the visual end product. Bruinsma (2005 [1997], p. 179) asserts that graphic designers should follow the multimedia model where the role of the designer has moved away from visualising to conceptualising and creative thinking. He suggests the design industry has already acknowledged that there are two aspects to graphic design activity. These require specialists such as creative 'conceivers' and 'technical visualisers', and also generalists who conceive and manage conceptual consistency. The two are not mutually exclusive and most designer's embrace both to some degree based on their personal interests or abilities. Freelance designers by virtue of their profession are more likely to adopt both roles whereas design agencies encourage specialism as a working practice (This will be discussed further in Chapter Six, pp. 222 - 225). Faced with a society of software literate non-professionals, Bruinsma (2005 [1997], pp. 179 -180) argues designers need to re-evaluate their role and educationalists should consider how best they might be educated. He observes that industry requires both digital artisans who can deal with technologically complex details and software and also designers who can organise and manage highly complex communication tools. It is the latter that creatively conceptualise in meaningful and aesthetically pleasing ways the different contextual and technological levels of the communication. These designers require the ability and therefore a thorough basic knowledge of very diverse forms, production, and media in order to evaluate content. Their main asset therefore is their conceptual vision and creativity rather than the actual visualisation (making) of the communication.

Due to the way that design education is currently organised in the UK, US, and Western Europe, Bruinsma (2005 [1997], p. 180) asserts it delivers neither the generalists advocated by Swanson (1997 [1994]), nor specialists. Like Dewey (2007 [1916]), Bierut (1994), and Swanson (1997), Bruinsma (2005 [1997], p. 180) argues that design education continues to be geared in the main towards specialisation rather than generalisation. However, he suggests that educating graduates with a broad general knowledge using critical thinking would better enable them to navigate complex conceptual problems and engage in creativity. In order to produce work ready graduates for an industry that asks for very diverse professional skills, Bruinsma (2005 [1997], p. 180) recommends that design education should diversify. Industry already works in this way with creative teams working alongside

visualisers, who are highly skilled in all industry standard software, and specialists from outside the immediate discipline of design in order to address wider societal issues.

Today many graphic design courses are structured using core mandatory modules supplemented with option modules geared towards offering alternative areas of interest to students. However, the modules tend not to move outside the traditional domain boundaries of graphic design. Theory, criticism and practice should be linked in a more holistic and meaningful way. For designer/generalist's emphasis should be placed on creativity and critical thinking. More time for specialists, for example visualiser's, should be provided to hone their respective skills by acquiring practical experience. Significantly, more inter-disciplinary learning should be encouraged to engage students outside the immediate discipline of graphic design. This in turn would better model the role of the designer in industry. This issue has now been taken up by a joint education and government initiative through the launch in 2020 of the *London Interdisciplinary School*. Whilst it is not a design school specifically it does recognise the increasing importance of inter-disciplinary education in support of solving societal and cultural issues.

Learning through Practice

Within the UK, US and Western Europe assignments, projects, and briefs are the predominant learning tools within design education and many of these activities are centred on a 'learning by doing/making' approach (Linda Drew, 2007 p. 113). As already noted, this practice-based model (studio or workshop) has a long history accommodating substantial changes. However, Stuart Macdonald (2004 [1970], p. 365*)* argues that the understanding that creative design emerges directly through working and experimenting with materials is relatively recent in art and design education. Lyon (2011 p. 87) and Drew (2007, p. 113) confirm that recent pedagogical developments offer a wide range of frameworks for understanding studio-based or learning through doing approaches to learning. Some of these consider for example, the role of the learner, the relationship between the teacher and the learner, and the learner's understanding of and relationship to their discipline.

The foundation of the learning through practice approach can be linked to experiential learning theory attributed to the work of John Dewey in the 1920s and 1930s, Kurt Lewin and his contributions to experiential learning in training and organisational development, and Jean Piaget's work on cognitive development (David Kolb, 1984 p. 140). Substantial work has been conducted in this area including that of David Kolb, Chris Argyris and Donald Schön. Understanding it relies on being part of a specific professional group and understanding their values and practices. Cheri Logan (2008, p. 15) asserts that it is the work of Schön (1987) and his emphasis on the uniqueness of the 'practicum' that fit design subjects particularly well. Schön (1987, p. 33) described the practicum as being:

> … organised in terms of its characteristic units of activity and its familiar types of practice situations and constrained or facilitated by its common body of professional knowledge and its appreciative system.

Learning through practice is usually linked to studio or workshop practice and the acquisition of skills and techniques. Maziar Raein (2003, p. 1) argues this is widely accepted as a key learning and teaching philosophy in practice-based art and design settings. The emphasis is on the importance of particular types of learning space, the significance of experience, and the activity of making to learning. Rachel Sara, (2006, p. 324) agrees and explains that the studio is both a process and a place. As a place it is where most of the design work goes on with students working alongside each other with various levels of intervention from tutors and external critics. For example, guest clients in tutorials and design reviews. This parallels the working methods in design agencies where clients, creative directors, and senior art directors review on-going work. As a process, David Boud (1985, p. 13) explains it is usually centred on project-based learning such as a client brief. Through a combination of research, experimentation and design, students are required with varying levels of input from tutors and other specialists, to respond to the client or project brief. Sara (2006, p. 325) suggests the process of design is learned through the student engagement with the project and the various stages of the project generally mirror the design process as used within industry. These studio-based projects are supported by practical technician-led workshops in computer labs for software training and lectures and seminars held in lecture theatres for contextual studies.

Lyon (2011, p. 83) identifies that the four key themes that emerge from studio-based learning through doing are working around or through a problem or brief, formal and informal exchange between staff and students (and amongst students), the significance of experience as a critical and intellectual aspect of the design process and creativity, and the process of exploration and experimentation through making. She explains that as an approach to learning and teaching, 'learning through doing' requires active participation by students as opposed to static and passive absorption reflecting a heuristic[29] learning style. Absorption in the physicality of a particular experience and an active and focused approach to experimentation are extremely important characteristics of design student learning and creative development.

In education, 'learning styles' refer to a range of theories that propose all students have a preferred 'style' of learning and whilst the theories suggest different views regarding how these styles should be defined, Stephen Dinham (2016, p. 3) explains they all agree that individuals differ in the way that they learn. Learning styles group common ways in which students learn and whilst some students may have a dominant style of learning others may find they use different styles in different circumstances. The styles are considered significant in that they influence how a student learns by changing the way students internally represent experiences, the way they recall information, and how they express themselves. According to John Hattie (2012, p. 103) there are seven recognised learning styles, visual (pictures, images, and spatial understanding), aural (auditory/musical), verbal (linguistic both in speech and writing), physical (kinaesthetic, using body, hands, and sense of touch), logical (mathematical, using logic reasoning and systems), social (interpersonal, learning in groups or with other people), and solitary (intrapersonal, working alone and self-study). Most design academics would argue that their students tend to be visually and physically biased in their learning styles and the 'learning through doing/practice' approach reinforces this. However, students of graphic design equally call upon other styles due to the nature and practice of the discipline. For example, students engage in linguistics and logical reasoning as much as visual and tactile styles and working as part of a team is fundamental to their

[29] Heuristic learning uses experience as an aide to learning, discovery, or problem-solving by experimental and 'trial and error' methods of exploratory problem-solving that utilise self-educating techniques. SOURCE: North American Montessori Centre, 2010.

practice. Frank Coffield, David Moseley, Elaine Hall, and Kathryn Ecclestone (2004, pp. 1-2) confirm that learning style theories have been criticised in recent years by both scholars and researchers who argue that there is little empirical evidence to show that matching teaching methods to learning styles has any significant effect on student learning. Arguably therefore, in design terms, the successful master/apprentice model of learning appears to have more connection with experiential learning and learning through practice than with specific learning styles.

Creativity and Assessment

Irene Visser, Lisa Chandler, and Peter Grainger (2015, p. 53) argue that design education is built around the notion of creativity. Tertiary level institutions market their design courses on the basis that creativity is an essential condition of being a successful design student. Course descriptions and learning objectives[30] are written with this in mind. However, Dewey (2007 [1916], pp. 78-85) and Doughty (2006, p. 19) assert that the requirement for courses to be written in terms of 'learning aims and objectives' that explain what students are intended to achieve at different points on their progress towards an academic award is problematic. According to Lyon (2011, p. 116) they have been criticised as part of a 'behavioural' education obsessed with measurability. Designed to keep students controlled and limited to specific types of 'pre-packaged' learning they remain current in UK tertiary education assessment practices. Doughty (2006, p. 19) argues the learning objectives approach *"destroys authentic educational opportunity by undermining curiosity, imagination, reflection and criticism".* Visser, *et al.* (2017, p. 53) agree explaining that creativity is also hindered by assessment processes as students focus on grade outcomes or become attached to a limited set of concepts that are drawn from their pre-existing knowledge. They argue that producing creative outcomes involves experimentation and risk and this can lead to a students' perceptions of 'failure' that impacts on their confidence and desire to explore creative approaches. As a consequence, students are liable to envisage their own practice in relation to assessment and produce formulaic

[30]The philosophy of Learning Objectives is derived from the educational theories of Benjamin Bloom. Emphasis is given to action words that describe what a student will be able to 'do' as a result of a particular course or activity. SOURCE: Bloom, Benjamin S. (1956) *Taxonomy of Educational Objectives, Handbook 1: Cognitive Domain.* London: Longman.

work that draws upon past successes. Visser, *et al.* (2017, p. 55) argue therefore that design educators face the challenge of instilling a mind- set that embraces experimentation and conditions for 'failure' within an educational context where assessment frameworks with prescriptive tasks and criteria are emphasised. Many of the Academic Practitioners in the graphic design survey observed that only in an academic environment will design students have the opportunity to experiment freely in order to develop their creative abilities and this should therefore be encouraged. Once in industry this opportunity will no longer be available to them due to the pressures of commercial practice.

The teacher-student relationship is important in influencing student confidence and creativity. Ellen Sims and Alison Shreeve (2012, pp. 55-67) and Ruth Dineen (2006, p. 111) suggest that creative process dialogue between teachers and students is fundamental in the development of professional creative thinking. Visser, *et al.* (2017, p. 63) agree and argue that extensive forward feedback[31] in graphic design, where originality and creativity are identified within assessment criteria, is invaluable. However, they observe that because creativity can involve challenging set parameters and generating unexpected outcomes it is difficult to specify levels of creativity within assessment. Therefore, creativity is often determined by assessors using tacit knowledge. P. Grainger (2015, pp. 1-13) identifies that this can be a problem as criteria for assessment should provide guidelines for students and a benchmark for assessors. In graphic design there are important benefits for students in terms of their professional careers in providing forward feedback that leads to a better understanding of the role and value of creativity and risk-taking. Current developments in learning and teaching pedagogy acknowledge that the creative process is in conflict with accepted academic pedagogy. However, Visser, *et al.* (2017, p. 53) confirm that alternative forms of assessment are regularly reviewed in design education.

Students today tend to focus on gaining a definable and employable set of skills and capacities. According to Lyon, (2011, p. 96) this focus is encouraged by changes in

[31] 'Forward feedback' is a term used in education to denote feedback that looks ahead to future assignments offering constructive guidance on how to do better as opposed to 'feedback' which focuses on current performance in order to justify a grade. SOURCE: https://www.jisc.ac.uk/guides/transforming-assessment-and-feedback/feedback.

curriculum as a direct response to industry requirements and government reports. Students are also under greater financial pressure to obtain their qualifications, gain employment, and pay off their debts. This inevitably leads to a more conservative approach to learning. This 'safe' approach to learning in tertiary education is a continuation of similar tendencies in secondary education so students arrive already conditioned to respond in kind. Lyon (2011, p. 98) and many of the Academic Practitioners in the graphic design survey argue that the competing demands on the curriculum for example, the requirement to prepare students for work in industry and to develop skills suitable for life, ensures that much of the curriculum is heavily structured and pressurised away from time and reflection on the creative nature of the design process.

Professional Skills

When the role of the professional designer and what constitutes design practice is considered, it is apparent that a very varied skillset is required. This skillset includes drawing on knowledge and understanding outside the immediate domain of graphic design. Equally, design today is collaborative in nature with designers working within teams. For example, different design and technology specialists such as print and internet-based media, client teams including marketing and communications specialists, and end users and customers that requires an understanding of consumer psychology and behaviour. Mark Kingsley (2005, p. 253) and Shaughnessy (2010, p. 18) put this in context by explaining that designers are required not only to produce attractive visual solutions they also have to persuade the client of their merits and in doing so engage in diplomacy and often psychoanalytical appraisal of the client. This often includes the use of business data, such as market research, to validate their proposals. To do this requires a range of professional skills including for example, verbal, visual, persuasive, and commercial. In considering the breadth of skills utilised the process of educating a graphic designer becomes complex. Kingsley (2005, p. 253) asserts that whilst there is currently no pedagogical consensus regarding how and what to teach a designer, what is agreed is the importance of understanding the professional context in which their practice is situated. This is due to the current emphasis in education on employability and the pressure of industry

requirements. This necessitates recognition within education of both the collaborative and inter-disciplinary nature of contemporary design practice.

Tony Becher and Paul R. Trowler (2001, p. 41) argue that finding ways to express and explain how a discipline is shaped in tertiary education is a challenging task. In an academic context the term 'discipline' refers to a branch of instruction or learning that is by implication well-founded, well-established, and accepted. However, at the same time they are also often in a state of flux with new interdisciplinary fields emerging and continual discussion regarding the shape of the discipline. This is particularly pertinent to the on-going shifts in discipline boundary experienced within graphic design since the 1980s. It is still an issue today due to the rapid technological developments that see the discipline developing to embrace new skill sets and the continually shifting boundary which expands to embrace other disciplines within design practice. For example, business and professional skills such as marketing and brand management and web-based media. Equally, Lyon (2011, p. 35) argues that disciplines cannot exist outside of or separate from the social and cultural practices of the academics involved. A discipline is intimately connected with the way academics in that discipline behave, write, and describe or articulate their subject to each other. Academics therefore have an active role in constructing the cultural environment of both their subject and institution.

Communities of Practice

The educational benefits of working across disciplines include enabling students to identify with different intellectual and professional traditions and thereby grow their 'community of practice', appreciate, and adopt different approaches to gathering and analysing information, and developing their world view in support of creativity. Shaughnessy (2010, p. 99) believes that designers make decisions about what they consider good and bad design using an internal set of aesthetic codes and opinions developed in part through contact with both intellectual and professional traditions from within their community of practice.

In coining the term 'community of practice' the educational theorists Jean Lave and Etienne Wenger (1991 p.29) argued that the learner does not function in isolation but as part of the social group and environment they are located in. In terms of design

education this involves other learners and teaching and technical staff who form a network of expertise and interest. Learning and knowledge is developed through the interactions of those in the community. In addition, learning takes place in particular contexts that might involve familiarity with and understanding of certain behaviours, specific environments (e.g., the client environment), or certain types of learning space. Lyon, (2011, p. 100) and Drew (2007, p. 113) argue that the benefits of learning within a community of practice are significant when considering the social dimension of design education issues and approaches. 'Community of Practice' is a term often associated with situated learning theory, a theoretical model linked to art and design pedagogy through its use of studio-based practices and the teacher as an embodiment of a practicing artist/designer. The master/apprentice system engaged within a workshop model.

Situated Learning Theory

John Seely Brown, Allan Collins and Paul Duguid (1989, pp. 32-42) confirm that in situated learning theory knowledge is situated because it is a product of the activity, context and culture in which it is developed and used. They explain that learning is socially constructed through negotiation amongst a community of past, present, experienced, and inexperienced members, and forms what they refer to as the 'culture'. Unlike conventional approaches to teaching where academics teach a subject to students, this approach establishes the academic as a design practitioner whose students are inducted into the culture as novice design practitioners. Brown *et al.* (1989, pp. 32-42) refer to this as 'cognitive apprenticeships' and illustrate this by drawing parallels between this methodology and craft apprenticeships. These apprenticeships exist within their respective cultures and social interaction and collaboration takes place between peers and experts within these frameworks. Yiping Lou (2004, pp. 4192-4194) and Davis (2008, p. 29) assert that within such a learning context, peer collaboration is significant in aiding the acquisition of complex skills, knowledge and ultimately creativity. As discussed in Chapter Four p.14, recognising that the tradition and culture of design is different to that of craft is critical to defining creative practice today because the design curriculum and content is structured accordingly.

The Graphic Design Curriculum

Since the appearance of graphic design at the beginning of the twentieth century definitions of practice have changed dramatically and graphic design practice in the twenty first century is markedly different to the print-based medium of the late nineteenth century. Whilst these changes reflect changes in practice within the design industry, design education is in a state of flux regarding what graphic design is and should include in terms of the curriculum. This confusion is exacerbated by the design industries that articulate differing requirements in terms of the preferred educational characteristics and skillsets of the contemporary design graduate. Where it is discussed the problem of articulating what comprises design is apparent. In the occasional report *The Economic Rationale for a National Design Policy*, Peter Swann (2010, i) quotes six essential characteristics of design as described by different commentators:

> These are the multi-faceted characteristics of design; design as a link from creativity to innovation; design as a source of competitive distinction; design as an approach to planning and problem-solving; design as a means of creating order out of chaos; and design as an approach to systems thinking.

The characteristics are expressed in general terms and therefore open to interpretation. Defining design therefore might lie in the combination of these characteristics or the precise way in which they are understood. Lyon (2011, p. 27) argues that arriving at a working definition is important because curriculum development seeks to explore these themes and to define the content for the discipline. The themes also indicate how far design education is experienced in terms of physical space, institutional cultures and language. Significantly in terms of creative practice, the characteristics described by Swann (2010, i) observe the fluid domain boundaries that surround the discipline.

The design curriculum is generally structured by discipline for example, graphics, digital media, illustration, photography etc. under the broad umbrella of ‘visual communication’. Graphic design students typically spend their first year in tertiary education working through the ‘design fundamentals’ discussed earlier that introduce them to the language and accepted conventions in graphic design including typography, page layout, form and function. Academic texts in support of practice will include introductory texts such as, *The Fundamentals of Graphic Design* (Gavin

Ambrose and Paul Harris, 2009) and 'how to' manuals in support of training such as *Making and Breaking the Grid: A Graphic Design Layout Workshop* (Timothy Samara, 2002). These titles are also marketed to non-specialists and can be considered to reinforce the view that by following a process or formula graphic design and creativity can be 'learned'. Students will be encouraged to consider graphic design contextually with academic texts reflecting current issues in design practice such as *Green Graphic Design* (Brian Dougherty, 2008) and *Good: An introduction to ethics in graphic design* (Lucienne Roberts, 2006). Later in their studies students will be introduced to academic texts reflecting professional practice such as *Design in Business: Strategic Innovation Through Design* (Margaret Bruce and John Bessant, 2002) and *Design Management: Managing Design Strategy, Process and Implementation* (Kathryn Best, 2006).

During the second or third year, students work through a series of projects on discipline specific tasks that may be aligned to live client briefs, involve internships in design agencies or engagement with industry-based design competitions such as the D&AD design awards. Several of the Academic Practitioners in the graphic design survey commented that their students are encouraged to engage in these activities. The final year culminates in an exhibition of their work that is considered important in promoting the quality of the student experience in terms of graduate skill capabilities and future employability. It also promotes the educational 'product' on offer by the University.

Rarely do students from one discipline work with students from other disciplines. This is unfortunate bearing in mind the interdisciplinary nature of professional practice where designers from a variety of disciplines might be brought together to work on a specific client brief. For example, graphic designers and web developers in the production of a corporate or promotional website. This lack of collaboration in design education can be attributed to a number of factors and has a significant impact on a students' ability to work in a professional context. Considering the acquisition of professional skills training is now encouraged within curriculum development it is surprising that little interdisciplinary learning is in place.

In the report *All Our Futures: Creativity, Culture and Education* the National Advisory Committee on Creative and Cultural Education (NACCCE, 1999, p. 82)

underlined the importance of interdisciplinary learning when they argued, as described by Boden (1990, p. 4) in Chapter Two, p. 13, that making new connections is the basis of creativity. They explained that pressures on the curriculum encourage rigid divisions in subject teaching and observed that outside of the educational environment some of the most dynamic developments are the result of the interaction between disciplines. They predicted that in the future education would be a shared enterprise that will not stop with formal education but will be continuous and open-ended. It would be provided not only by formal education but also by businesses, commercial organisations, new technologies, artists, scientists and many other professionals within the wider society. They argued that education is a collaborative enterprise that requires others to lend their resources and expertise. In 2006 the Design Council (2006, p. 23) set up a multi-disciplinary *Design Network*, supported by the Higher Education Funding Council for England (HEFCE) and the National Endowment for Science, Technology, and the Arts (NESTA). The aim was to facilitate the sharing of knowledge and best practice across Universities, to improve curriculum design and assess the impact of their initiative. However, it focused primarily on postgraduate level study across disciplines observing that it would be difficult to implement multidisciplinary activities at undergraduate level. Barriers to multidisciplinary teaching in the main relate to logistics. This includes for example, the amount of staff time required to put group practice together along with difficulties due to modularity in timetabling activities between different disciplines, or budget models where funds are allocated based on student numbers and which discipline 'owns' a given module. Lyon (2011 p.103) asserts that unless the broad goal of multidisciplinary teaching is broken down into desirable learning attributes it is difficult to integrate within the students' educational experiences. The conflicting demands on both students and staff are substantial. Other barriers relate to artificial 'boundaries' between disciplines or communities of practice where issues of identity and practice are sometimes defensive in nature. As observed earlier, the issue of interdisciplinary tertiary education is now being addressed by the government and educationally led initiative with the formation of the *London Interdisciplinary School* (2020).

The Emphasis on Employability

The UK today is recognised globally as a leading centre of design education as well as for its contribution towards the Creative Industries (Cox 2005 p. 10; Department for Business Innovation & Skills (BIS) 2016, p. 7; Creative Industrial Council (CIC) 2016, pp. 26-27). However, John Kampfner, Chief Executive of the Creative Industries Federation to *The Guardian*, cautions:

> …we are at an incredibly dangerous moment… for creative education. If we fail to think long term, if we fail to invest in our …cultural education, the talent pool that has projected us on to this level of the past 10 or 20 years will dry up. (Faith Archer, 2015)

In January 2015, the Warwick Commission released its report *Enriching Britain: Culture, Creativity and Growth* highlighting major concerns that the current educational system was not focused on the future needs of the Cultural and Creative Industries and the broader needs for innovation in the UK. The Report argued that the Government's focus on Science, Technology, Engineering and Maths (STEM) should also include the Arts. Interestingly, design is not mentioned and by default therefore assumes design as either part of the Arts or absent. The Commission (2015) urged the government not to let the UK fall further behind in developing an education system that would *"ensure that current and future generations have the technological, entrepreneurial and creative confidence and skills to drive economic growth".*

The new media pioneer and director of the Knowledge Transfer Network's *Creative Industries, Design and Digital Economy Programmes* Frank Boyd agrees arguing that the emphasis on STEM skills does not take into account that what is actually driving success in businesses is a combination of design with STEM. Boyd (Faith Archer, 2015) cites empirical evidence from the Brighton Fuse study of the cluster of creative, digital and IT businesses around Brighton. Conducted by the Universities of Brighton and Sussex with funding from the Arts and Humanities Research Council the study showed that businesses grew more rapidly, at twice the speed than the British economy as a whole, when they combined or "fused" creative design and technology in their work. The study observed that one of the enabling factors that made growth possible was people with skills that could work across traditional organisational or discipline boundaries.

John Mathers, Chief Executive of the Design Council (2015), asserted that the current educational system cannot keep up and Industry is crying out for well-trained, work-ready designers. He argued that while design schools are producing great designer's they lack understanding regarding how to apply their design skills strategically. There is a desperate need to combine real-world experience and multidisciplinary approaches as well as critical theory in the way students are trained (Archer, 2015). Interestingly, he uses the word train rather than educate. Dale Harrow, Dean of the School of Design at the Royal College of Art (2015), argued that despite the strength of Britain's design sector it is neither sufficiently recognised nor supported. He suggested that if the UK does not take design education and the capabilities of design and creativity within industry more seriously it will ultimately risk losing out to other countries (Archer, 2015). For example, China is concerned with the lack of creativity within from their education system and is beginning to recognise the value of the liberal arts.

Writing in the *RSA Journal*, Arnie Bieber (2016, pp. 22-23) argues that today's curriculum in primary and secondary education is instrumental in preparing students for tertiary level education. He observes that the current framework is no longer able to prepare today's graduates to creatively navigate through the continuously moving currents of global change. For example, discussing divergent thinking (a key component of creativity discussed in Chapter Two, p. 11), he references a study which showed that whilst 98% of 3-5-year-olds demonstrated an ability to think in divergent ways the same study revealed that only 10% of 13-15-year-olds and only 2% of 25-year-olds were divergent thinkers. Bieber (2016, pp. 22-23) acknowledges that there are many factors influencing this but argues that formal education is one of them.

In their Report NACCCE (1999, p. 84) stated that developing creative abilities is fundamentally important in meeting the challenges of economic development. They argued that new ideas and innovation are increasingly important in the development of new products and services as a means of providing economic competitiveness. As global economies continue to change, the demand for creative resources throughout business and industry will increase. These creative abilities will be fundamental to the process of work as will the ability to communicate effectively, work in teams,

and adapt to new demands and opportunities. The Report (NACCCE, 1999 p. 84) argued that as patterns of work change, all young people and adults will need to be adaptable to both changes in working processes and to the likelihood that they will change their job and occupation during their working lives. As discussed earlier by Dewey (2007 [1916], p. 234) developing creative abilities and the competences and attitudes they require will be central to this.

Design education is built on the premise of the 'designer' who will ultimately graduate as the 'creative professional practitioner' contributing to economic and cultural creativity (Lyon, 2011 p. 28 and Alison Shreeve; Noam Austerlitz, 2008 p. 139). It is the key objective of the current process of design education. Underpinning this process is the curriculum and throughout the twentieth century curriculum content has changed substantially in response to internal institutional pressures such as government led widening participation[32] initiatives and external commercial factors such as the gradual 'professionalisation' of the discipline. Together with other issues for example, the degree status of institutions requiring more theoretical content within practice-based disciplines, the rapidly changing technological environment, and new learning and teaching initiatives due in part to the widening participation schemes, they have created a curriculum that is constantly in a state of flux and under pressure to respond to the latest initiatives. These issues remain and continue to influence curriculum development today.

Writing in *The Education of a Graphic Designer,* Heller (2005, p. ix) is justified in observing that there is not enough time in a three-year undergraduate program to acquire, develop and master all the necessary skills required of a twenty first century practitioner. He argues that due to the limited timeframe, and emphasis on employability, in reality what is taught are intensive classes in technique and technology. Other key issues such as creativity and conceptual thinking, strategy, psychology, marketing, and other abstract and practical issues are equally required

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[32] In 1998 the UK government published its Green Paper '*The Learning Age'.* Educational policies sought to widen participation and expand training opportunities within further and higher education. (Department for Education and Employment, 1999).

In 2002 the House of Commons issued two reports: '*Widening Participation in Higher Education in England'* and '*Improving Student Achievement in English Higher Education*' which documented the government's policy for the further expansion of education.

but often absent. Many of the Practitioners within the graphic design survey upheld this view. Heller (2005, p. ix) asserts that with the growing external pressures on the designer to demonstrate both business skills and added value that there has never been a more important time to acquire formal design qualifications and ultimately professional status within the discipline. However, as argued in Chapter Four, it would not be possible to attain professional accredited status for graphic design due in the main to the diversity of practice and the developing interdisciplinary nature of the profession. Heller (2005, p. ix) argues that the time and money spent in qualifying for design degrees are commensurate with the increased demands that business, technology, and culture have placed on designers coming into the profession. However, the fragmentation and specialisation of design has also demanded increased educational rigour. In spite of the steadily growing production demands now placed on graphic designers due to changes in working practices (see Chapter Three, p. 126) Heller (2005, p. x) observes that the design industry still places a higher status on designers who are employed as creative conceptualists and strategists. As graphic design does not have board-tested certification and few curriculum conventions other than proficiency on the Apple Macintosh computer most undergraduate programs provide similar content. Heller (2005, p. xi) explains that without board certification academics are free to construct the curriculum as they see fit with content being driven by the expertise of the teaching staff at any given time. Teaching excellence therefore varies considerably between educational institutions.

It is generally accepted that design as a discipline is more commercial in its objectives than other arts subjects. Sparke (2009, p. 10) and Lyon (2011, p. 46) observe that both students and teachers of design are highly aware of their relationship to industry noting that educationalists make conscious efforts to bear the needs of industry in mind when designing and delivering the curriculum. Undergraduate programs are often structured to take into account industry partners and the relationship with industry is often discussed by both teachers and institutions as a point of pride. However, efforts to produce graduates who are considered to be employable by industry has resulted in University curricula becoming overloaded with industry led content at the expense of creative development. Many of the Academic Practitioners within the graphic design survey confirmed that attempting

to meet the needs of industry affects approaches to learning and teaching and the educational development of design students as the curriculum remains weighted towards vocational training in its limited sense rather than education in its fullest sense.

Society today is experiencing growth in knowledge and information on an unprecedented scale. This expansion will continue and result in increased specialisation in all design disciplines. This specialisation is necessary but will lead to a loss of sight of the bigger picture – how ideas connect, inform, and contextualise each other. As observed in Chapter Two this is critical to creativity. Whilst maintaining a balance between breadth and depth of learning is a major challenge for both teaching and curriculum design it is critical that students have more access to information and ideas and ways to engage with them in order to support their creative abilities.

Conclusion

Graphic design education developed historically as a response to the Victorian concern with UK economic competitiveness. It followed the tradition of craft training and apprenticeship that emphasised skilful making by hand. As such, design education became associated with skills training in support of the needs of industry providing the model from which design education has developed today. Vocationally based learning and teaching continued throughout the twentieth century however, its true meaning as a direction of life activities that are significant to the individual and useful to others in society has been lost in contemporary design education.

The economic boom, increased consumerism and growth in social and digital media associated with the twentieth century led to the entrenchment of professional and digital skills training within the design curriculum. Professional skills became important because the working practice of the designer changed due to the requirement to work across more diverse teams. Digital technology was significant because it influenced the required skillset of the designer with software expertise becoming mandatory. The importance of digital competence is reinforced by an industry that generally hires graduates based on their software programme knowledge and skill. The current focus on professional and software skills training

has moved the educational emphasis within the curriculum away from theory, creativity, and critical thinking.

As industry becomes increasingly technologically based design occupations have greater intellectual content and larger cultural possibilities than in the past. This requires graduates with greater intellectual capacity, cultural understanding, and creativity in order to provide solutions to contemporary societal problems. However, the growth in knowledge and information due to the digital age has resulted in increased specialisation in all design disciplines. This specialisation is necessary but leads to a loss of sight of the bigger picture in terms of how ideas connect, inform, and contextualise each other. Maintaining a balance between breadth and depth of learning is a major challenge for both teaching and curriculum design however, it is critical that students have more access to information and ideas and ways to engage with them in order to support their creative and critical abilities.

Chapter 6 - Creativity in Industry: A Graphic Design perspective

Introduction

Throughout its evolution graphic design practice (unlike graphic design education, see Chapter Five, p. 185) has responded proactively to the needs of industry and commerce through up skilling, embracing the multidisciplinary nature of design, and recognising that teamwork is a significant aspect of the design process. These developments in design can be directly mapped against the political, environmental, social, and technological changes happening within the UK, particularly during the 1980s when design writers began to recognise graphic design as a significant part of the design culture emerging at that time. Baldwin and Roberts (2006, pp. 12-13) assert that these changes have been instrumental in shaping both the creative industries and graphic design practice as it is understood today. Three further areas of contextual influence that are particularly relevant to graphic design practice include the business context in which most design practice is located, government policy influencing design practice, and the organisation of design including how designers view themselves (Heskett, 2005 p. 112 -128). The importance of design and ultimately creativity to the twenty-first century UK economy has reached a critical point. Data regarding the impact of design and creativity is being more accurately measured and reported elevating both the practice and theory of design to new levels of importance. Many non-design commentators regularly reference design thinking, design process, and design methods in terms of teaching, policymaking, business, and technology. What they all agree on is that the future workforce will be dependent on highly skilled, knowledge led people working in multi-skilled teams (Sevra Davis and Josie Warden, 2018 p. 8). 'Hybrid' skills combining expertise with commercial and problem-solving skills will become increasingly important.

This chapter considers graphic design within the context of the creative industries and identifies how creativity in graphic design supports not only the needs of industry but also the discipline of design, the business economy and the wider society. The narrative considers graphic design from the advent of digital technology during the 1980s onwards until the present day. It identifies that there has been a shift in the understanding of design away from the 'designing of artefacts' discussed

within the graphic design survey to ‘design thinking’. This represents a significant move from considering design as the making of artefacts to design as a critical problem-solving activity that makes sense of things in order to provide creative strategic input to client briefs.

An Overview of Graphic Design in Industry in the UK

The 1980s within the UK experienced a significant period of transition in many areas. Design writers observed changes in the organisation of industrial production to new production regimes and information technologies. Stuart Hall (1988, pp. 24-30) explains that these changes were characterised by more flexible and decentralised forms of labour and work organisation, a decline in manufacturing with the rise in computer-based industries, and the contracting-out of functions and services. The economy was dominated by multinational corporations experiencing new international divisions of labour and globalisation of the new financial markets that were linked by the communications revolution also happening at that time.

Broader social and cultural changes were also taking place with growth in individual choice through personal consumption. Greater emphasis was placed on product differentiation leading to a rise in marketing led design and targeting of consumers by lifestyle, taste and culture rather than the Registrar-General’s categories of social class[33] (Richard Bland, 1979 pp. 283-291). Julier (2017 p. 22) identifies that new ways were evolving for design to influence and shape peoples’ lives. He suggests that as societies were discovering new uses and meanings of design a design culture was emerging. By the mid 1980s the arts began to consider the role of taste and consumption as a means for constructing identity and the interface of design and everyday life (Colin Campbell, 2018 [1987] p. 77; Dick Hebdige, 2002 [1988] pp. 45-116 and Daniel Miller, 1987, p.131).

Graphic design practice developed significantly at this time becoming more complex and highly skilled in response to these changes. Design became strategised and professionalised with many design studios beginning to refer to themselves as

[33] Registrar-General *Social Class Index* is maintained by the Office for National Statistics and classifies occupations according to manual and non-manual categories.

branding consultants rather than graphic designers. Shaughnessy (2010, p. 99) notes that due to its developing relationship with business the status of graphic design grew, both within industry and the wider society. As observed in Chapters Four and Five, practice was transformed due to the impact of digital technology and the rise of new specialised disciplines for example, motion graphics, information design, web and interface design. Graphic design at this time was considered in terms of aesthetics, form making, and the logical presentation of information (See Chapter Four, p. 132). However, by the 1990s ethical, social and technological dimensions became important also. These considerations remain current today (See Chapter Four, p. 10 and the *First Things First Manifesto*). As discussed in Chapter Four these new dimensions necessitated the need for designers to broaden their sphere of knowledge. For example, the digital interface designer of today is required to work with computer code, hardware specifications and usability theory. This rise in both technical and other demands placed on the designer highlighted the requirement for and dependency on collaboration and design practice (though not design education, see Chapter Five, p. 185) ceased to be an individual activity. The process of 'design thinking' was recognised and utilised by businesses that saw its potential for creativity and innovation within a business context. It was considered a significant component in seeking new ways of managing businesses and engaging in entrepreneurial activity.

The sociologists Scott Lash and John Urry (1994, p. 4) confirm that late twentieth century economies were characterised as 'design-intensive' and argue that this gave rise to new interest in the way in which the aesthetics and form of social and cultural themes became key to economic productivity. In discussing the design process, they explain how creativity is managed within this new economic, political, social, and cultural landscape and outline the extent to which design practice is shaped by imperatives of accountability, transparency, and systemisation. This will be discussed in more detail later in the chapter. They identify that the global reach of design agencies has led to the dispersion of the processes of conception and execution within design. The creative development of projects is produced collaboratively through multiple communication networks. P. Dicken (2003, pp. 74-106) explains that these global networks, supported with digital and online technology, impacts on the design process itself facilitating a different kind of

proximity and speed of interaction between designers, producers and consumers. Significantly this act of creating with stakeholders (business or consumers) that is today referred to as 'co-design'[34] is an important move away from the autonomous creative acts of the individual designer maker. Creativity and critical thinking, specifically within the design development process itself, is a combined activity between designers and stakeholders ensuring that the design outcomes meet their needs and are useable in the context in which they are situated. Participant 5 from the graphic design survey, an Academic, confirmed the significance of the relationship between designers and key stakeholders explaining that:

> Because great creative work is almost always born from a collaborative process, the involvement of others - client included - facilitates this. In addition, the client has intimate knowledge and understanding of the subject/issue, etc, that the designer cannot hope to fully grasp during a project. Information from the client is needed in order to bring about not only creative ideas, but also appropriate and relevant ones.

What is not discussed here is the need for the designer to have a level of client subject/issue knowledge and fluency or at least a level of ability in terms of critical enquiry to enable a conversation with the client. There appears to be an assumption that the client will supply all necessary information and therefore the design project will have arrived pre-strategised by the client. There is also an assumption that the client and not the designer will identify if the creative ideas are appropriate and relevant.

The Creative Industries

Graphic design practice sits within the creative industries and contributes towards the cultural economy. The *British Council* (2008-2011) defines the creative and cultural economy in terms of the socio-economic potential of activities that utilise creativity, knowledge, and information as the basis for trade. It is increasingly recognised by both governments and creative sectors globally as an important generator of jobs, wealth, and cultural engagement. The cultural and creative industries, that encompass the arts, culture, business, and technology, are at the

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[34] *Co-design*, sometimes referred to as *Participatory design*, is an approach that focusses on the processes and procedures of design. It is not a design style.

centre of the creative and cultural economy. What they have in common is that they all trade with creative assets in the form of intellectual property (IP) which the *British Council* (2008-2011) defines as the framework through which creativity is converted into economic value.

An understanding of the academic and policy discussions in relation to the creative industries is important because it provides a foundation from which to analyse design and creativity. According to Julier (2017, p. 42) there are three issues to consider. First, whilst growth in design practice and education coincides with developments in the commercial marketplace, it also coincides with government policy and academic enquiry regarding the broader role of creative and cultural work. Second, whilst the dominant understanding presented in popular media is that creative and cultural work is produced by frontline practitioners such as graphic designers in reality creative work comes from the collaboration, and support between creative and non-creative people. Third, creative work often takes place in locations not obviously considered creative. These issues are discussed in more detail later in the chapter.

At the time of writing the UK has the largest creative sector within Europe and in terms of GDP is the largest in the world. According to UNESCO (United Nations Educational, Scientific and Cultural Organisation) the UK is the leading and most successful exporter of cultural goods and services in the world and the UK government has taken a lead in developing the agenda for the creative economy (*British Council,* 2008-2011). The UNCTAD (United Nations Conference on Trade and Development) report *Creative Economy* (2008, p. 4) provides an inclusive definition of the creative industries that recognises the wider society. They define the creative industries as:

> …the interface between creativity, culture, economics and technology as expressed in the ability to create and circulate intellectual capital, with the potential to generate income, jobs and export earnings while at the same time promoting social inclusion, cultural diversity and human development.

Terry Flew (2011, pp. 12-13) explains that categories of practice within the creative industries are varied. Some are very responsive to commercial structures and business cycles such as advertising and graphic design while others have or pursue independence for example, art and craft. The creative industries therefore encompass

activities that may be opposed to one another in terms of their ethical motivations, timescales, geographical reach, professional identity or forms of employment (Julier, 2017 p. 41). According to Julier (2017, p. 42) design is unusual within the creative and cultural industries because it overlaps and works with all the industries within these that have creative expression at their core. For example, a theatre company will use graphic designers to promote their productions through websites and posters etc. Design (and also architecture and advertising) is notable in that it works both within and outside the cultural industries however whilst it collaborates with other cultural activities the majority of its client base is in the non-cultural arena. Citing the *KEA European Affairs 2006* Report, Julier (2017, p. 42) explains that design, unlike architecture or advertising, in this context provides content in terms of the shaping of the actual practices, products and services within the wider creative and cultural industries.

In their report *"Growing the UK's Creative Industries"* the Creative Industries Federation (2019, p. 3) confirm that the creative industries are the fastest growing sector in the UK economy. They explain that whether large household names or small creative enterprises the creative industries are a diverse and interconnected sector. The majority of creative enterprises employ less than 10 people with over a third of the sectors workforce being self-employed. This brings its own difficulties and will be discussed later in the chapter. Having surveyed over 1,000 creative enterprises, conducted a series of focus groups and one-to-one interviews with trade bodies, government and support intermediaries, the report confirms that whilst governments traditionally measure growth by turnover or headcount, creative enterprises stressed other factors were important. For example, increased profile, social impact, and the reach of their creative brand, product, or service. The report explains that for most creative enterprises headcount was not a measure of growth due to the sector's freelance-heavy workforce. For example, many creative enterprises consist of a core team with freelancers contracted to provide specific skills and services. In order to realise their ambitions for growth many creative enterprises highlighted the importance of collaboration and partnerships, a trait that the Creative Industries Federation (2019, p. 4) confirm is particularly unique to this sector. However, they argue that it is imperative that this way of working is supported by national and local government, all UK industries, and international

partnerships. Although not discussed specifically within the report it is particularly important that this way of working is acknowledged and adopted within education. Creative enterprises share many of the challenges that are faced by the wider business community however, the Creative Industries Federation (2019, p. 4) confirm that lack of time, finance and funding, business support, and crucially creative talent are key challenges. They argue for recognition of creative education and skills development as a foundation for growth observing that the devaluing of creative education by government will limit this ability. Many of the creative enterprises interviewed in their report expressed concern that the English Baccalaureate (the combination of subjects identified by the government as important to GCSE study) does not include a single creative subject. This was considered a clear example of government not taking the needs of the UK's fastest growing sector seriously. Many of those interviewed confirmed there are already skills shortages believing this will be exacerbated if education fails to prepare the next generation for the future of work where creative skills will be crucial across all industries (Creative Industries Federation, 2019 p. 32). This point was reinforced in feedback provided by the majority of the participants within the graphic design survey, both Academic and Industry Practitioners. However, they also stressed the importance of critical thinking in support of creativity.

The Value of Design to the UK Economy

The *British Design Industry Valuation Survey 2006 to 2007* (BDI) reported that whilst the majority of work produced by design practices remained within the more traditional medium based disciplines, new skill sets were emerging in design, particularly in terms of service design and proposition creation. Proposition creation reflects a trend within graphic design practice to move beyond what is usually considered the visual translation of a client strategy.

It reflects the growing need for designers to contribute to client strategy and proposition creation utilising critical as well as creative thinking skills. The BDI indicates that 70% of UK design activity comes from the traditional 'design agency' with 20% of this design activity coming from the graphics related design practices. However, it also observes that 10% of the design activity comes from the 'strategic

design consultancy'. The emphasis within these consultancies is on how design and creativity can be used to gain competitive advantage or deliver public services more effectively. Creativity and critical thinking are promoted as unique selling points (USP's) by these consultancies in order to raise their profile above mainstream design agency models that focus on the design of artefacts rather than strategic proposition creation. Consultancies that provide strategic design are in a position to charge higher fees for their work and build longer term creative relationships with their clients.

The growing value and recognition of design and creativity due to new interfaces with both the commercial and public sector, for example by working with more departments within a corporate client organisation, has led to the growth in interest and importance in design accorded by these organisations. It is through these interactions with other disciplines that design has gained influence and authority. These new interactions require the work of designers to be more intelligently negotiated, that designers recognise client interests and priorities and observe their codes of conduct, professional practice, and modus operandi (Ellen Lupton and J. Abbott Miller, 1999 p. 201). However, whilst design education has attempted to address issues of professional practice the graphic design survey indicates that in terms of working within a client environment graphic design graduates remain limited in knowledge outside the immediate sphere of design.

Discussing the value of design, creativity and innovation to the UK economy the Design Council (2018, p.11) confirm that the design economy generated £85.2bn in gross value added (GVA) constituting 7.0% of UK total GVA. Building on their earlier report (Design Council, 2015) they also show that the design economy is growing. In 2016 the design economy employed 1.69 million people in design roles. Taken as one sector it would be the ninth biggest employment sector in the UK. Digital design accounts for one in three design roles and is the fastest growing area within the design economy. Businesses in this sector experienced 85% growth in turnover between 2009 and 2016. These figures indicate the growing importance of digital design to the UK economy. The Design Council (2018, p. 15) confirm that designers are better formally qualified (degree level) than the average UK worker and often more highly paid. They suggest this indicates a demand for design skills,

knowledge and services, and argue that addressing this demand provides a unique opportunity for the design economy. They also argue that there is a growing expectation amongst employers that designers will be educated to this level. They explain that many sectors of the wider UK economy have already experienced the benefits of design but suggest that some sectors have yet to fully realise its potential. For UK design education this is especially pertinent given the continued pressures on resources and requirements for improved efficiencies and creativity and innovation. In their earlier report (2015, p. 31) the Design Council confirmed that more than half of the respondents expected that demand for design-related skills will increase in their sector. These skills include originality and creative skills supported by digital skills. Significantly, they argue that the digital pioneers of tomorrow will need design skills to enable them to generate new ideas, products, and services. As argued by Nelson and Stolterman (2012, pp. 11-12) in Chapter Four, p. 14, they recognise that design is an intellectual process distinct from making. They also recognise that future growth within the creative industries will require the boundaries between disciplines to become more fluid and confirm that there is already evidence of growth of multidisciplinary clusters across the country. They argue therefore that institutions of Higher Education need to do more to dismantle the boundaries between subject areas to ensure they are preparing graduates who are fit for purpose in addressing future economic and societal needs (Design Council, 2015 p. 38).

The developments in the role of design, creativity and innovation discussed above, together with the intensification and speeding up of the design process itself is underpinned with a wider set of assumptions in terms of the New Economy[35] and the practices of 'faster, better, cheaper'. Publications such as John Howkins (2001) *The Creative Economy: How People Make Money From Ideas,* or Paul H. Ray and Sherry Ruth Anderson (2001) *The Cultural Creatives: How 50 Million People Are Changing The World,* describe how creativity and creative people lead this new economic landscape with creativity and innovation leading the business agenda.

[35] The *New Economy* is a term coined by economists in the US in the 1990s. It describes global high-growth technology-based industries that are a driving force of GDP growth and which represent a transition from a manufacturing based to a service-based economy. SOURCE: https://marketbusinessnews.com/

These assumptions and working practices have influenced how professional designers view the nature and purpose of creativity.

The role of design, creativity, and innovation within the 'new economy' is dependent on how they are managed. Writing in the *Harvard Business Review,* Scott Anthony, Matt Eyring and Liz Gibson (2006, pp. 104-113) argue the necessity for design, creativity and innovation to be pre-planned, strategised and mapped in order to respond effectively to the rapidly changing business challenges and scenarios. They describe the work of the designer not in terms of 'one-off' creative acts but as a process of iteration enabling designers to habitually 'process' projects. Creativity in design in this context is understood in terms of the adoption and iterative development of repertoires of action – what the authors refer to as 'scripted improvisations' – used in response to a variety of client briefs and requirements. These scripted improvisations provide a fast route to creative processes and solutions enabling designers to respond to the business environment where financial returns on creative work time have been reduced. Many of the Industry Practitioners within the graphic design survey acknowledged that 'scripted improvisations' were used on occasion as part of the design process. In order to justify it they explained the tensions experienced in practice in terms of the time required for creative engagement observing that due to cost issues the time allotted to creative development was always under financial pressure. However, Participant 7, an Industry Practitioner, argued the case for creativity indicating its commercial value stating "*Tensions arise between creativity and commercial considerations when cost is an issue. Often a designer will have amazing ideas that are prohibitively expensive. A balance needs to be struck between the two. Creativity can lead to commercial success and be considered a good investment where it is deployed effectively.*

Designers as Cultural Intermediaries

Many design writers have discussed the role of the designer as a cultural intermediary. Introduced by Pierre Bourdieu (1984, p. 360) the term is a concept similar to what other writers have called a 'service or knowledge class'. This refers to those engaged in occupations that have become central to capitalism by providing

"symbolic goods and services". For example, the arts, media, and entertainment industries generally but more particularly, advertising, marketing, and promotional activities. Keith Negus argues (2002, p. 4) that these intermediaries are instrumental in determining how culture shapes the economy as opposed to the economy shaping culture. They shape both use value and exchange value (relative market worth) managing how these values are connected with society through the various techniques of persuasion and marketing and through the construction of markets. Negus (2002, p. 4-8) explains that cultural intermediaries are those individuals positioned between designers and the consumer. Significantly, they include non-creative individuals such as senior managers/corporate executives, business analysts and accountants. Accountants for example, do not simply evaluate the financial pressures of commerce against design and creativity they are actively involved in what it is to be commercial mediating many of the values through which creative work is realised. The majority of the Industry Practitioners in the graphic design survey referred to the significance and influence of non-creative individuals within the design process, particularly in terms of the cost implications of producing creative design. However, Participant 8, an Academic/Industry Practitioner, highlighted the role of the designer as a cultural intermediary explaining that *"As an activity that is well integrated in current cultural evolution graphic design is a major indicator and influencer of ever-evolving cultural memes and currents in the society in which it operates through multifarious creative responses to briefs".*
Responsibility for the influencing and shaping of values, highlighted in Chapter Four, p. 10 in the context of the *First Things First Manifesto,* also often involves the concealment of knowledge, deception, and manipulation (a criticism levelled at advertising and marketing) and negatively expresses the impact of design in some contexts. Negus (2002, p. 11) argues that the growth of the cultural industries, dependent on advertising, promotional techniques, and marketing methods, has widened the distance between producers and consumers rather than making connections and closing the gap. It is a backward step in the consideration of graphic design as a credible and responsible business partner particularly in areas where the role of graphic design in the creation and development of ideas can be considered to mitigate risk, leverage opportunities, and create more value through outstanding customer experiences.

Cultural intermediaries are often characterised as self-conscious, reflective, and creative within their respective roles and activities (Bourdieu 1984, p. 360; Mike Featherstone 1991 p. 19; Justin O'Connor and Derek Wynne, 1996 p. 5). However, Negus (2002, p.11) argues that many of the creative practices discussed in academic study involve activities that are habitual and routine. For example, writing in 1972 Paul Hirsch introduced the concept of 'the gatekeeper' and focused on roles that span domain boundaries. The gatekeeper concept stressed the editorial selection involved in communications activities and therefore the production of particular versions of complex information and events. Negus (2002, p. 12) explains that although developed in relation to the study of news a generalised model of the gatekeeper can be used to demonstrate how key personnel control access to cultural production. Considering the various occupational routines and organisational values influencing the development of cultural artefacts highlights how they are created as a result of well-established routines that require little effort in terms of creating or sourcing. This makes working life easier for example, dealing with time pressures, deadlines, and production schedules. These in turn introduce certainty and predictability into the process and encourage adherence to formulas and patterns of working that have been successful in the past. Negus (2002, p. 13) observes that whilst these routines do not necessarily dominate activities, they are present and suggest that not all activity within the creative industries, and graphic design, is creative but is habitual, unreflective, and uncritical following established production routines and occupational formulae. Adherence to, and the implications of, working to occupational formulae will discussed in more detail later in the chapter.

Creative Sectors and Cultural Quarters

Networking, building relationships, being visible and available is considered vital within the design community. For example, Participant 14 from the graphic design survey, an Industry Practitioner, stated that *"networking and having the right connections…helps increase creativity and widens horizons".* Meeting others after work in order to network blurs the distinctions between work and leisure. Andreas Wittel (2001, pp. 51-76) and Angela McRobbie (2002, pp. 516-531) confirm that environmental planning policy actively provides spaces to encourage social networking among the creative industries. According to Susan Bagwell (2008, pp.

31- 46) and Jo Foord (2009, pp. 91-113) the development and identification of ‘creative quarters’ within many cities are deliberate attempts to provide networking spaces for procuring business. These clusters, supported by galleries, restaurants and bars, encourage a twenty-four-hour lifestyle where ‘art is life and life is art’. It is not only designers who enjoy the ‘buzz’ of being in a creative quarter but also clients who enjoy the perceived ambience of creativity (Graham Drake, 2003 pp. 511-524).

Ilpo Koskinen (2005, pp. 13-27) explains that ‘creative quarters’ play a semiotic role in the promotion of cities suggesting economic wellbeing with locations such as Manchester’s Northern Quarter providing a showcase for the notion of an entrepreneurial city engaged in entrepreneurial and innovative employment. However, he argues that focusing resources into what are already dynamic local industries rather than into struggling areas inhibits the balance between national and regional economies with those outside these clusters becoming wastelands. Equally, successful clusters, for example Liverpool, Birmingham, and Sheffield, run the risk of overheating whereby property prices rise to the point where people and businesses can no longer afford to be located there. Workers within the sector also congregate there meaning that supply is greater than demand potentially causing a downward turn on wages. Some cities become a strong draw for creative practitioners but ultimately are a victim of their own success. London has achieved recognisable status as an international capital in the creative industries however, Julier (2017, p. 53) argues that nationally this has had the effect of draining talent from other regions. The Design Council (2018, p. 15) and the Creative Industries Federation (2019, p. 11) agree confirming that the south-east of England continues to benefit from high value design occupations and innovation. Since the 1980s it has become the largest concentration of designers and creative industries’ specialists in the world. London and the South East of England account for nearly half of the nation’s design business. However, Julier (2017, p. 54) suggests it may be that design businesses look for proximity to potential clients and corporate head offices that are often found in regional or national capitals or to transport hubs rather than a desire to be part of a cultural quarter.

The Professionalisation of Graphic Design Practice

Julier (2017, p. 23) identifies three key initiatives that occurred in London during the 1980s that were instrumental in shaping graphic design practice and the wider creative industry. The first was the publication of *Design Week* (1986), the world's first weekly design magazine aimed at all design sectors. It was instrumental in changing the way design agencies worked. In this pre-internet environment agencies could find freelance designers at short notice to work on cross-disciplinary projects through classified ads. In global terms another significant moment was the deregulation of the London Stock Market (1986) that led to the ability to move money in new ways. Eric Clemons and Bruce Weber (1990, pp. 41-60) confirm that turnover practically doubled over night and face-to-face trading dropped in favour of deals being made by telephone and computer. Both of these events initiated new working practices. These included longer and more flexible working hours due to globalisation, the speeding up of transactions which affected the design process, a loosening of divisions between specialisms, and increased project-orientation towards multi-disciplinary teams. The third key initiative was the opening of the Business Design Centre (BDC) in London. A 'one stop shop' for designers and clients it was intended to free up the time designers spent on sourcing products and services in favour of spending more time on their creative work or meeting clients. Significantly, it provided wider infrastructure services to the design industry encouraging entrepreneurialism (Julier, 2017 p. 25). The opening of the BDC coincided with the establishment of the Design Business Association (DBA), a direct spin-off from the Chartered Society of Designers (CSD). However, unlike the CSD that was inward looking and with a focus on the professionalisation of design, the DBA was more commercially oriented. They published a directory of design consultancies and their services, provided client advice on how to commission design, and offered training and mentoring for members to support them in dealing with the commercial rigours of running a design business. The UK design industry grew rapidly throughout this period. By 1989 the CSD supported six categories of design – product, fashion and textile, interior, graphic design, education, and design management. However, within graphic design, specialisms such as retail, exhibition, packaging, and corporate identity were becoming increasingly prominent and subject to their own specific skills and knowledge bases. As a result, a variety of agency and consultancy models evolved in response to this (Julier, 2017, p. 24).

The Design Agency/Consultancy Model

Graphic design agencies and consultancies are generally defined by the activities they engage in and services they offer. These are categorised by what the design industry refers to as 'above the line' (ATL) or 'below the line' activities (BTL). Above the line activities are those that engage with mass media in order to promote brands or services and to reach out to target consumers. These activities include conventional media such as television and radio advertising, print such as press advertising and internet marketing and promotions. Advertising agencies are typically referred to as above the line agencies however they also include graphic designers within their staff. Below the line activities include those that use less conventional methods of promotion such as direct mail campaigns, public relations (PR) and sales promotion. Specific activities typically include targeted email campaigns, tele-marketing, exhibitions, and trade shows. These activities are weighted towards the production of printed items such as leaflets and packaging etc. (items typically associated with graphic design) and this is the reason why graphic design agencies are sometimes referred to as BTL agencies. BTL activity is often selected by clients over ATL for reasons of budget as activities are usually less expensive than 'buying' expensive airtime. However, it is also preferred when a more direct or targeted campaign is required in order to engage a personal interaction with a consumer. For example, a direct mail activity over email. Alternatively, it may be preferred when there is a need to physically display a product. For example, packaging and point of sale (POS) material in a retail store environment.

Digital media has broken the boundaries of ATL versus BTL activities as digital communication can address both at the same time. Today clients and agencies tend to adopt an integrated approach to their communications. Activities are therefore referred to as 'through the line'. The change to integrated communications with the advent of digital technology led to changes in how agencies promote their services and there are now fewer agencies offering exclusively below the line activities. In moving from a purely print based service to a marketing or communications led service most design agencies now promote themselves as a 'communications agency', 'creative agency' or 'creative consultancy'. This is an attempt to assure clients that they have the necessary strategic marketing and brand management skills that advertising agencies have been engaged in since their conception.

Consultancies are usually defined by their ability to provide additional services such as market research and business planning. The decision to name themselves 'creative agencies' is not accidental. Advertising agencies have for decades been considered as creative thinkers whereas design agencies were considered to simply apply the surface decoration to the product or service (see Chapter Three and Four) once the creative thinking by the client or advertising agency was complete. The design service therefore was traditionally considered the poor relation to the advertising agency on these grounds and commanded lower fees. Changes in services on offer from today's creative agencies have implications for education as agencies are now looking for a broader skill set from graduates who are required to think creatively and critically, understand client business and work strategically with clients. Participant 9 from the graphic design survey, an Academic/Industry Practitioner, placed this in context stating:

> The most obvious creative activity is ideation however this has to be supported by understanding the client and the problem. To creatively investigate a brief is to find the heart of the problem… this is an intellectual and playful engagement with the problem… usually during an initial client meeting. This enables a shared creative vision from which to identify connections and creative directions. Creative development as an activity involves looking for opportunities.

Managing the Design Process

Changes to the internal operation within design agencies and consultancies during the 1980s emphasised a focus on accounting and workflow and some of the larger agencies such as *Fitch* (1982) and *Michael Peters Group* (1983) were floated on the *Stock Exchange*. Julier (2017, p. 25) observes that this in turn led to significant growth in terms of their staff numbers and also expansion in terms of their reach with many agencies offering services globally. Increased capital enabled many of them to expand their competencies to include for example, consumer research and marketing, and this agency growth led to further challenges in terms of how they were managed.

Before the 1980s the internal management of day-to-day activities within the agency was informal and unstructured, particularly in relation to time and cost. However, increase in agency size resulted in larger scale projects. These might involve the coordination of a range of activities including for example, graphic design,

marketing, and research. Therefore, managing the design process across a number of individuals or teams became necessary. More formal processes were introduced to manage this such as creating workflow systems and timesheets to organise and capture time and ultimately costs. Julier (2017, p. 25) explains that the profit motive, mainly considered the responsibility of the administrative staff, became front of mind for design teams also with efficiency and faster turnover of design projects a working imperative. The commercial reality of managing design became a serious consideration in the creative process. The implications of this were raised by Participant 9 from the graphic design survey, an Academic/Industry Practitioner, "*Every client wants the best possible solution to their problem regardless of time and cost. However, the reality is that some clients want the job done quickly and cheaply and the results are often depressingly uncreative".*

Multi-disciplinary Design Teams

When a design agency grows beyond a certain size the time commitment to managerial functions rises making it difficult to maintain personal levels of creativity. Heskett (2005, p. 46) explains that due to this the role of creative director, who overseas teams of hands-on designers, comes into play alongside the role of account managers who provide branding and client expertise. Equally, many design consultancies are managed as businesses and have a group ethos. This is particularly the case in global ones, where large numbers of employees are located in international offices working on a variety of projects. Teamwork characterises this model and there is little room for individual creativity. Corporate design groups, whether external consultancy or in-house design teams, may work on several generations of products or services over a long period of time. As such they need to maintain specific expertise without becoming creatively stale. To overcome this, they combine the in-house design team which provides continuity with external consultants and freelance designers that provide fresh stimuli and a broader perspective. Participant 23 from the graphic design survey, an Industry Practitioner, explained the issue stating "*the categories and markets in which my team have to operate are some of the highest-consumption and longest- established applications of graphic design. This has created a very sophisticated and varied*

consumer/audience appreciation of graphic design resulting in a significant challenge when trying to creatively innovate".

Most design projects require alternative forms of knowledge. Larger projects particularly involve complex interactions in terms of technology and organisation requiring involvement with other types of knowledge and individuals. Heskett (2005, p 48) asserts that in these projects rational and structured methodologies can aid understanding of the full dimension of a project and serve as a platform for creative solutions in terms of execution. For example, user-information might be provided by a marketing team in order to inform the designer's creative solution. Market analysis and user experience methodologies are long-established tools in support of creative ideation. Heskett (2005, p. 50) notes that these methodologies have been adapted from disciplines such as anthropology and sociology. For example, behavioural observation is used to gain insights into difficulties faced by users in a variety of contexts such as working environments, consumer shopping, or learning. Detailed observation can reveal issues that can be addressed by new design solutions. Whilst educationalists today address the issue of providing graphic design students with the opportunity to engage with alternative forms of knowledge considered important in terms of vocational training, they have yet to fully address the integrative nature of design practice. Students continue in the main to work independently rather than in teams (see Chapter Four, p. 200).

Full-time Roles, Freelance and Internships

The design industry does not necessarily thrive in periods of economic growth. It actually does better during economic downturns when products and services have to work harder to promote themselves. Julier (2017, p. 48) asserts that this expansion and contraction of workflow within agencies invariably affects job opportunities. Many designers, particularly the junior ones, have to deal with the consequences of quiet periods, redundancies or equally a rise in work demand. Their performance within the agency therefore becomes a significant measure of their worth when times are hard.

Graphic design is generally a long-hours, low turnover profession. A UK survey conducted in 2013 by *Design Industry Voices* confirmed that of those surveyed over

80% said that clients expected more work for less money, 68% agreed that agencies are using more freelancers and 42% agreed that agencies are using more unpaid interns. These statistics are cause for concern because they affirm a generally held view within the design community that design work offers little job security, involves flexible employment patterns and that clients continually push for low project budgets. Julier (2017, p. 50) identifies that graduates coming into the industry often find themselves in insecure or short-term positions and over-qualified initially for the role they gain working well below their capabilities. Due to moving from one organisation to another they are continually learning new technical, commercial, social and communication skills and adapting to the specific structures and processes within a given organisation. The industry defends this by arguing that junior designers are being given opportunities to build experience across a number of different organisations enabling them to broaden their skills. These will provide them with the opportunity to move to a more senior agency position, establish themselves as freelance designers, or set up their own design business. Shaughnessy (2010, p. 41) confirms this is standard practice within the industry and should be considered a positive, necessary, and unavoidable step towards becoming an experienced designer. He justifies this by explaining that a graduate generally takes from approximately six months to a year to become an effective studio member assuming that the graduate is closely mentored during this time. However, Julier (2017, p. 51) and Naomi Klein (2000, p. 245) assert that whilst the industry uses this argument in support of graduate internships the reality is that they can only be taken up by individuals who can support themselves independently throughout the internship as they will invariably be working for free. Julier (2017, p. 51) suggests the practice of long hours, flexible working and working for free by graduates and interns may have been driven by decades of pressure from clients to drive down the costs of design.

Work within the creative industries has always been casual presenting few opportunities for a ‘job for life’. The Creative Industries Federation (2019, p. 10) and the Design Council (2015) confirm that since the 1980s the emphasis in design on flexible working conditions, project-based employment and multi-skilling has seen a rise in the proportion of designers engaged in freelance work. Julier (2017, p. 52) argues this may be due to freelancers preferring the flexibility that working alone

affords rather than as a result of insecure employment patterns. For example, it enables them to move between clients or agencies expanding their knowledge and experience, provides autonomy on working hours, and networking opportunities. However, Shaughnessy (2010, p. 51) notes some designers freelance because they have specialist skills (particularly digital skills) that they can charge well for whilst others are simply the 'creative loner' with a strong personal vision that is not easily accommodated within an agency environment.

The Design Process

During the 1980s many clients were experiencing working with an agency or consultancy for the first time and this in turn led to the need for designers to explain what they did and how they charged for it. Large global agencies such as *Fitch* developed a 'design process' model that could be used to educate both clients and staff. It led to faster turnaround of projects and easier production in terms of the volume of projects handled. Julier (2017, p. 25) argues it significantly supported the development of client trust and the streamlining of the design process itself. Changes happening within the larger agencies set the standard for the design industry with smaller agencies adopting these working practices and the professionalisation of design practice was established. As a direct result of the increase in global reach of both clients and agencies the professionalisation of design throughout the world also followed this model to some degree.

As outlined in Chapter Two p. 21, the design process itself is iterative and design agencies build contingency into costs to allow for this. Below is a typical model and assumes client approvals at each stage. However, this is not always given and a stage in the process may need to be revisited which is why the process is iterative in nature.

CLIENT BRIEF – RESEARCH – REFINE BRIEF – CLIENT APPROVAL - IDEATION/CONCEPTS – CLIENT PRESENTATION OF CONCEPTS – CONCEPT DEVELOPMENT – FURTHER CLIENT PRESENTATION – CLIENT APPROVAL – ARTWORK – CLIENT APPROVAL – PRINT/PRODUCTION – CLIENT APPROVAL - DELIVERY – POST EVALUATION

Project Teams

Agencies put together project teams based on the requirements of the client brief and these teams are not fixed beyond the immediate project. Designers and other agency staff work across a number of teams based on different briefs. The members of a team are selected due to their skill set and experience. Whilst each team has a number of standard team members for example, account handler, project manager, designer, artworker etc., the type of individual involved in these roles will depend on the requirements of the brief. For example, a brief for a corporate brochure will require a designer with skills in editorial design, a brief for a website will require a designer who works within multimedia.

Team members may or may not be involved in each stage of the design process according to their role and experience. For example, a senior designer may be present at a client briefing along with an account handler and a production manager however, an artworker or junior designer may not. Whether a designer is considered capable of 'front of house' activities will depend on their experience and degree of professionalism in front of a client. Graduates and junior designers invariably work within the studio environment and are not client facing until they are deemed to have the necessary business acumen to enable them to function appropriately in front of a client. Acquiring business skills is part of the process of professionalisation of a designer and often not addressed in education for example, Participant 7 from the graphic design survey, an Industry Practitioner, explained "*One of the hardest things I had to deal with in my first job was figuring out how the admin worked, i.e., how invoices were raised and paid, ordering from suppliers and general office etiquette".* How teams are put together depends in the main upon the size of the agency. Large agencies with large and varied staff will have multi-disciplinary teams that might also include third parties such as market research specialists. However, in smaller agencies with fewer staff it is not unusual for example, for senior designers to work in the capacity of account handler, artworker or production manager.

Project Management

Professional design studios are tidy, well ordered environments that look more like offices than creative spaces and workflow and tracking procedures follow projects.

In larger agencies with more complex projects proprietary systems such as *Oracle Workflow* may be utilised to allocate resource, indicate costs, and monitor progress of projects within the studio (Anne Marie Dorland, 2009 p.105). These systems are also used to track where things go wrong however, this is for the benefit of the agency rather than the client. The reporting nature of the systems are used to define the design process to clients in financial terms as a means of providing transparency and support presentations in budget discussions between designers and clients. Design budgets are produced by dividing design projects into individual tasks such as creative ideation, artwork, account management, etc. These are produced at different hourly rates according to role, for example junior designer, artworker, creative director, account manager etc. Staff are charged at different rates according to either seniority (and therefore experience) within the agency or role. Roles are defined by activity and the rate charged for an activity is based on its 'value' to both the client and the agency. For example, creative ideation and critical and strategic thinking are charged at a higher financial rate than artwork and production (the craft of the discipline that utilises industry standard software for graphic design, video editing, and web development applications such as *Photoshop*, *Illustrator*, and *InDesign)*.

Dorland (2009, p. 112) notes that design work is reviewed not only by clients or end-users but also by agency staff. These include creative directors, studio production managers and account handlers who appraise the creative work at various stages in its production through the studio. Design work therefore becomes a series of negotiations with key creative, production, and managerial staff as it moves through the agency approval system hierarchy. The designers' performance is also measured within these stages and becomes the evidence upon which a career progression is made. The designer is therefore tied into a set of procedures that control and negotiate their success (Julier, 2017 p. 48).

The move from graduate to professional designer is invariably a big step for most graphic designers. Mario Moura (2010, p. 95) observes that although graduates may be used to working long hours on projects they are not used to accounting for this time. Working on a design project already scoped out in terms of units of time is one of the most difficult transitions a graduate designer will make in the process of

producing design work and being creative. Participant 8 from the graphic design survey, an Academic/Industry Practitioner, explained that the workplace environment presents situations that do not occur in even the most realistically conceived curriculum confirming for example that "*one of the most common revelations I witnessed in interns was an astonishment at such short deadlines; another was the fact that other factors such as cost, time, resource allocation etc. needed to be addressed".* Equally, graduates may be used to showing their work to others but not adept at promoting its value or worth. This role is invariably taken by either a more senior designer, production manager or account handler during the budgeting or presentation of design work.

Whilst design agencies promote themselves based on their creative abilities some projects may be 'processed' according to what Negus (2002, p. 13) refers to as 'occupational formulae'. For example, Dorland (2009, p. 108-113) explains previous work may be recycled, design magazines and books used as a source of ideas, and photographs and illustrations sourced from image libraries rather than commissioned specifically for the project at hand. Following brand guidelines, the 'look and feel' may already be determined through meetings with the account manager and the client where issues such as production requirements and budgets will have been discussed. Additional 'client-based material' such as images and copy may have also been provided. Liz Moor (2012, pp. 563-580) suggests this type of design work is much more routine than might be imagined and viewing design in this context brings into question the extent to which designers might be considered as cultural intermediaries.

Project Evaluation

The most significant part of the design process from an industry perspective, and one that is rarely discussed in undergraduate design programmes, is how design is measured and evaluated in terms of what makes a graphic design intervention successful. Chapter Four considered the significance of the creative brief and argued that without a good creative brief a successful piece of graphic communication is unlikely to be produced. However, only by measuring and evaluating a piece of graphic communication post-delivery can its real success, or failure, be understood.

Whilst an understanding of how to communicate effectively and technological proficiency are common to all areas of graphic design, domain specific understanding varies considerably. For example, understanding how to promote products and services differs from understanding how to provide navigational signage for environmental use. Therefore, achieving the objectives of a given piece of communication requires working with others outside the discipline. Graphic designers are always engaged in active dialogue with either their clients or other professionals such as marketing managers, educators, editors etc. in order to inform their practice. Frascara (1988, p. 23) argues that this has significant implications in the evaluation of graphic design and the role of creativity. He asserts that quality in graphic design should therefore be measured by the changes it produces in the audience, not in terms of aesthetics or stylistic innovation.

Most definitions of graphic design propose that it solves the problem of a visual communication to a client need. However, Frascara (1988, p. 25) argues that the solution to a client need is not the production of a piece of visual communication but the modification of people's attitudes or abilities in some way 'after' the communication has taken place. This modification can be a 'change' such as changing from one product to another, a 'reinforcement' such as encouraging people to drink responsibly, or 'facilitation' such as instructions on how to use a product or service. Clarity of message and aesthetic attractiveness do not necessarily guarantee achievement of client objectives however they usually contribute to success. Therefore, the results of a graphic design intervention should be measured by achievement of the objectives set out in the client brief that generated the need for the production of the visual communication in question. The success of a piece of visual communication is invariably measured by specialists other than graphic designers. They interpret public response, evaluate design performance, and give advice regarding appropriate modifications to the communications strategy if better results are required. Frascara (1988, p. 26) notes that these specialists may come from a variety of disciplines including marketing, sociology, psychology, and education. What they have in common is that they are concerned with the behaviour of individuals and groups and the problems of interpreting, quantifying and qualifying information, applying the information to practical ends. The completion of a piece of graphic design is not when the project is produced and delivered but

when it has been evaluated and therefore evaluation is an important part of the design process.

Conclusion

Graphic design practice is influenced and affected by society, culture, business, and technology that is constantly and rapidly changing. These changes present opportunities but also challenges. The UK design industry is well-placed to address these opportunities and challenges, particularly in terms of driving growth and innovation in support of the economy. However, whilst graphic design has a critical role to play there is significant work required within design practice and education in order to stay ahead and capitalise on these changes. With UK businesses being continually challenged to keep pace with changing global markets understanding how graphic design can engage with and support industry will be important. There is a wealth of evidence that indicates the importance of the relationship between graphic design practice and UK business, particularly in terms of creativity and innovation. However, there is also evidence substantiated by responses within the graphic design survey that indicate the discipline of graphic design and particularly design education, is out of step with the needs of UK business and industry. Rather than addressing the opportunities and challenges presented, design practice remains focused on the design and styling of artefacts rather than creative and critical design thinking in support of twenty-first century political, industrial, economic and societal issues.

Chapter 7 – Conclusion

This concluding chapter reflects on the key findings within the research and discusses how these might be used in order to inform future creative practice within graphic design. Consideration is therefore given to the contribution to knowledge this research has made, and suggestions outlined for areas of future study in response to the findings presented.

The aim of the research was to consider the current perception that the development of design education has led to an incomplete picture and therefore understanding of the role of creativity in graphic design amongst graduates. In order to address this the research project asked the question: what is the role of creativity in graphic design? In considering this question two associated questions arose. The first considered the role of creativity in terms of its economic, social, and cultural value within contemporary practice by asking; why is creativity important to graphic design education and industry practice? The second considered the role of creativity in terms of curricula content and vocational, intellectual, and professional formation and asked: how can creativity be facilitated within graphic design education and industry practice? The research was centred on graphic design practice and education within the UK therefore the research considered graphic design as it is understood within Western European culture. The thesis was divided into six chapters that reviewed creativity holistically from a number of perspectives. Each chapter considered these within a given context such as design education or industry practice. Collectively they consolidated and evaluated the main issues concerned in relation to the research questions. Through both the primary and secondary research the views of key design educationalists and industry practitioners in relation to current and future practice were considered. These perspectives enabled the testing of the current theoretical framework and provided new ideas and connections from which to create a new framework. This new theoretical framework will enable further discussions and research in relation to the role of creativity in graphic design.

A small-scale qualitative online survey was designed and emailed to named design practitioners and design educators. The aims of the survey were to discover if the combined community of practice reflected the same experiences and perspectives

presented and speculated on in the forward and if not, what alternatives should be considered. It was also essential to establish parameters for discussing the role of creativity in graphic design within the thesis as definitions and terms of reference differ widely. While the sample size limits the ability to make general statements regarding the findings, the approach does provide new insights into the understanding of the role of creativity across the discipline that might be explored in further, more extensive research. The survey was supported with a theoretical, historical, and contextual framing of the research questions via a literature review. Due to the lack of critical writing in relation to creativity in graphic design practice, it was necessary to read in the context of other disciplines, for example product or industrial design, where practitioners and educationalists experience and write about similar issues. The combined research found that the term creativity means different things to different people and understanding what it means to be creative has changed significantly over time. Equally, it is valued in different ways by a variety of stakeholders across the arts, sciences, humanities, business, commerce, society, and culture (Kaufman and Sternberg, 2010 p. xiii).

One of the main findings from the primary research is that the concept of creativity holds different meanings amongst practitioners with design educators and industry practitioners approaching creativity differently. This highlighted the need to identify common terms that might be used to describe creativity specifically in relation to graphic design practice where the terms creating and making were used interchangeably. Many of the educationalists in the survey were less able to explicitly express what the role of creativity is, and therefore its value, in a commercial context. Equally, while industry practitioners recognised that specific qualities and skills were involved, they were unable to explain how they might be addressed in an educational context. Whilst the literature review provided a modern definition of creativity that was recognised and quoted to varying degrees by the majority of practitioners within the survey it became apparent that a more discipline specific definition was required when discussing creativity in graphic design. The significant difference between the two definitions of creativity discussed, one general one domain specific, was in the importance given to critical thinking in the development and role of creativity in graphic design. Some of the practitioners across both education and industry highlighted this difference but several,

specifically the academic practitioners, did not. Understanding amongst the practitioners varied regarding what constitutes critical thinking, particularly in education where it is often discussed in terms of reflective practice. However, this is only one aspect of critical thinking (Moon, 2008, p.126). The majority of those surveyed confirmed that both creativity and critical thinking are important and integral to practice. Critical thinking in particular was considered a significant part of practice and an aid to creativity and this thesis argues it is important as a way of defining creativity in graphic design. Whilst there was no overall consensus in terms of what constitutes creativity, or what its role is in terms of graphic design, all the practitioners were in agreement regarding its benefits and considered creativity to be valuable to practice.

Findings within the literature review confirm that due to its craft-based heritage (Shiner, 2001; Atkinson, 2013; Margolin, 2013) design practice continues to reflect historical perceptions and models of creativity that are reinforced within the community of practice. These distinguish craft-based practice, defined in terms of the process of making items of utility, from the fine arts that are considered to be more involved in the pursuit of intellectual and creative skills. Although historically craft as an activity was completely embedded within society, the evolution and democratisation of knowledge and visual culture since the Age of Enlightenment (Meggs, 1997 p. 53) has reinforced the view today that graphic design is more concerned with style and decoration (form) than creative and critical thinking in response to the needs of society. Challenges facing society today require solutions that are creative and innovative. In order to address these societal issues, it is essential that designers re-engage their relationship with and their role within social contexts. However, this is problematic as graphic design has yet to develop its own domain separate from art or craft where designers can investigate their practice and the social value of design. This in turn contributes to the difficulties experienced when discussing the role of creativity in design practice as design continues to be described and evaluated in terms of craft (Nelson, Stolterman 2012, p. 2). This limits perceptions and expectations regarding future practice because graphic design is not defined as an intellectual and creative practice.

Several of the findings within the survey confirm the findings from the literature review. Critically, they suggest that as design education is currently geared towards specialism rather than generalisation with vocational training, professional skilling, and an emphasis on employability underpinning the teaching models utilised (Swanson, 1997; Bierut, 1994), there is a widening gap between educational imperatives and those of industry. This calls into question whether or not design education is fit for purpose. By analysing changes in practice throughout the development of the discipline of graphic design this thesis has shown how the current understanding of creativity as making rather than creativity as thinking has shaped current perceptions regarding what constitutes creativity and its role within design practice. Due to the educational focus on intellectualising the discipline in the late twentieth century understanding creativity has become increasingly important in graphic design. However, its role has not been explicitly articulated amongst educationalists and this is critical if it is to be recognised as an established way to engage with graphic design in the twenty first century. This is significant if graphic design practice is to address contemporary social, political, cultural, economic, and technological challenges.

Findings from both the graphic design survey and the literature review confirm the views expressed by Boddington (2012, p. 14) that whilst graphic design education is well placed to address contemporary societal issues it has done little to date to reflect on whether it should, how this might be achieved, and whether the current curriculum includes appropriate content. As discussed by Lupton and Cole Phillips (2015 pp. 10-13) it suggests that design education continues to focus on instilling the knowledge and skills of the community of practice with the nature of knowledge and how it is acquired rarely discussed. These communities of practice create barriers to recognising and engaging with other forms of skill and knowledge. Both the design survey and the literature review confirm therefore that the censorship of creativity and its role in graphic design appears to be due to the views of individual practitioners rather than the commercial environment or the wider society.

Society, business, technology, and design practice are constantly and rapidly changing presenting both opportunities and challenges. The UK graphic design industry is well placed to address these, particularly in terms of driving growth and

innovation in support of the economy. However, whilst graphic design has a critical role to play, there is significant work required within education and design practice in order to stay ahead and capitalise on these changes. With UK businesses being continually challenged to keep pace with changing global markets, understanding how graphic design can engage with and support industry will be important. There is a wealth of evidence that indicates the importance of the relationship between graphic design practice and business, particularly in terms of creativity and innovation. However, there is also evidence substantiated by responses within the graphic design survey and the literature review that demonstrates the discipline, particularly design education, is out of step with the needs of business and industry. Rather than addressing the opportunities and challenges presented, design practice continues to be focused on the design and styling of artefacts rather than creative and critical design thinking in support of twenty-first century societal issues and needs.

It is vital that the concerns raised within this thesis are addressed in order that graphic design practice continues to develop and respond to the changing environments it finds itself working within. Addressing the current understanding of creativity within the discipline and its role in practice is fundamental to ensuring that graphic design has a future in twentieth century culture and society. However, the findings from this research conclude that it may not be in a form that is currently recognised by either education or industry practice.

Contribution to Knowledge

Utilising a mixed methods approach that includes an online qualitative survey of current graphic design practitioners and design academics, a literature review of the extant scholarship in the field, and personal insights as a graphic design practitioner and educator, this study has brought together all the threads that relate to the experience of practice, education, and industry in terms of the current understanding of the role of creativity in graphic design. In doing so it contributes to knowledge in two ways. Firstly, it confirms that whilst the last twenty years have seen general design research gain momentum the discipline of graphic design continues to be under researched in terms of scholarship. As such there is a lack of critical writing within the discipline confirming that the intellectual and theoretical underpinning of

graphic design practice is weak. This thesis is one of the first to address this issue. Secondly, it confirms that this critical topic has not been researched or written about before in the context of graphic design.

The research proves that there is a lack of synergy between what theoreticians, educationalists and practitioners consider creativity and its role to be within the discipline of graphic design. It argues that the accepted design canon is out of step with the needs of twenty-first century practice. Therefore, new considerations need to be taken into account and brought into play in terms of how the discipline of graphic design and its relationship with creative and critical thinking is understood, discussed, taught, and practiced. The research contributes scholarship in the discipline by developing a new conceptual framework that in turn provides new perspectives from which to engage in further research and dialogue. In doing so it contributes to knowledge within the under-explored areas of creativity and graphic design.

Areas for Future Study

The results and findings of the current study indicate a number of important areas for future research when considering the role of creativity in graphic design. To better understand the implications of these results, future studies could address the following:

1 - Review the current Educational Framework

Many of the issues or 'problems' that designers engage with today are complex necessitating the requirement to engage with knowledge outside their immediate domain. However, the findings of the research indicated design students are currently under-educated for the task (Norman, 2010, Graphic Design Survey, 2020). The issue for higher education therefore is how to provide graphic design communities with the confidence, interest, and skills to interact with other forms of knowledge. This continues to be a challenge due to the design sectors apparent unwillingness to contribute to or exchange with alternative communities of practice (Boddington, 2012 p.14). Repositioning the intellectual base of design practice would require significant changes to the current educational framework in which

learning takes place and is an area where further investigation would be beneficial. A new educational framework would enable graphic design educationalists to develop a culture of creative and critical enquiry, initiate alternative environments in which to provide practical experience, and develop new tools and methods combining knowledge and skills that draw on both the past and present in order develop new forms of practice. Achieving this requires that educators themselves understand what new knowledge is necessary and how teaching and learning initiatives might reflect this. Further study could support this.

2 - Re-consider Creativity and its Role in the context of Graphic Design

The findings from the research indicated that the role of creative and critical engagement in graphic design education is misunderstood and should be reconsidered. Curriculum design should focus on the ways in which knowledge is combined, evaluated, experienced and applied rather than purely on the making and development of content. This calls into question the relationship between creativity and critical thinking in the formation of graphic design interventions. Understanding this relationship and the role it plays within graphic design will better enable both educators and designers to understand and question the world today in order to respond to and create the world of tomorrow.

3 - Consider Collaboration and Co-production

Current vocational training in discipline specific activities associated with practice that are intended to ensure graduates are work ready on leaving higher education is problematic. The research identified that these activities do not encourage engagement with new knowledge outside the immediate community of practice that would lead to greater knowledge and understanding from which to draw when engaging in graphic design. A benefit of doing so is that it would enable the ability to move around more freely in the sector adopting alternative roles. This would facilitate the future proofing of graduate work opportunities. For example, the role of creative facilitation or mediation reframes design practice and presents new challenges and opportunities. Emphasis here is on collaboration and creative co-production. Significantly, process and purpose are more important than quality of the

creative output. This is opposite to current educational practice where the quality of the creative output is perceived as more important.

Each of these avenues for further research should take into consideration that graphic design in educational terms is becoming increasingly isolated from graphic design in commercial practice. There is today a degree of urgency in the requirement to re-appraise how design students are educated. The first step towards this will be to understand the role of creativity and its relationship to critical thinking in the development of graphic design practice in order to facilitate its development within educational and industry practice. One positive outcome from the survey was that many of the participants, academics and industry practitioners, confirmed they found the questions useful and thought provoking in terms of their understanding and consideration of their own practice. Additionally, the significance of the research in the context of graphic design was recognised by the community of practice.

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Appendix 1

Ethical Approval Form (5pp)

UNIVERSITY OF WOLVERHAMPTON

Faculty of Arts Business and Social Science (FABSS)
Ethical Approval Form

SECTION ONE

Application Date	Date Approval Required By
23/03/2020	10th April 2020

	Yes	No
I have read the latest Ethics Guidance on the RPU webpages.	x	

Name & Contact Details	
First name	Carol
Last name	Meachem
University Email address	[e-mail address redacted]
Student number (if applicable)	1132088

Level of Research: Indicate all relevant	
Academic Staff	
Postgraduate research student	x
MPhil	
PhD	x
Post-doctoral	

DoS or PI/Researcher: Name where relevant		
Name of Director of Studies	Dr Louise Fenton	
	Yes	No
I have discussed completing this form and the ethical issues of the research with my DoS	x	

Name of Principal Investigator/Researcher	Carol Meachem

Faculty of Arts, Business and Social Sciences Subject area (indicate all relevant)	
Wolverhampton School of Art	x
School of Humanities	
School of Performing Arts	
University of Wolverhampton Business School	
University of Wolverhampton Law School	
School of Social, Historical & Political Studies	
Other (please specify)	

Research Centre (list all relevant)
CADRE

SECTION TWO

2.i	Full Title of Project
	An Investigation into the Role of Creativity in Graphic Design

2.ii	Ethical Category	
	Category 0	
	Category A	x
	Category B	

2.iii	Give a brief summary of your research project indicating your rationale and aims
	The purpose of this study is to establish current understanding of creativity and the role of creativity within the discipline of graphic design in order to initiate new discussions going forward. The aim of the study is to support future practice and HE research initiatives within graphic design by developing a theoretical/critical framework from which to engage in further discussions around creativity with both practitioners and educationalists. The scope of the study includes a representative sample of academics teaching on graphic design programmes in UK institutions of Higher Education and graphic design practitioners working within the UK. The questionnaire will be used to provide the primary research data findings and analysis required in support of the theoretical and contextual sources utilised within the thesis. The data findings and analysis will provide one chapter of the thesis. Expand as necessary

2.iv	Methodology: How will your research be conducted?
	A) Via an anonymous qualitative online questionnaire using Survey Monkey. (See indicative questions attached). No more than 130 participants in total will be approached for the scoping study. Participants of the online questionnaire will be approached via an emailed covering letter and information sheet (See attached). Expand as necessary

UNIVERSITY OF WOLVERHAMPTON

SECTION THREE

3.i	Is ethical approval required by an external agency? (e.g. NHS, other HE institution, NGO etc.)		
		YES	NO
	Ethical approval from external agency is required		x
	If YES, please provide details:		

	Contact details of person from whom permission is sought (if known) or obtained

3.ii.a	Does your research involve participants under the age of 18 or other vulnerable group?		
		YES	NO
	The research involves participants under the age of 18		x
	The research involves other vulnerable participants (specify)		x
	Is a certificate required from the Disclosure and Barring Services (DBS)		x
	I have obtained a DBS certificate		x

3.ii.b	If your research does involve participants who are under 18 or from a vulnerable group indicate what measures you will take to safeguard them and protect their rights.
	Expand as necessary

3.iii.a	Does your research fit into any of the following security-sensitive categories		
		YES	NO
	Commissioned by the military		x
	Commissioned under an EU security call		x
	Requires acquisition of security clearances		x
	Concerns terrorism or extremist groups		x

3.iii.b	If you have answered yes to any of the above, please supply details. What measures will you put in place to ensure that your research cannot be misconstrued as supporting extremism and that you ensure your own safety etc.?
	Expand as necessary

3.iv.a	Is your data set of potentially illicit origin? This is data that is obtained without the consent of the original data owners or data subjects	
	Yes	No
		x
3.iv.b	If you have answered yes, please supply details:	

SECTION FOUR

4.i	Give an overview of the main ethical issues raised by your research (e.g. confidentiality, anonymity, conflict of interest, sensitivity of data, potential for harm etc.
	There are no major ethical issues relating to the research beyond those of confidentiality and anonymity of participants. Expand as necessary

4.ii	How will research participants be identified and recruited? How will you ensure that potential participants will be fully informed about the nature of the research?
	Academic participants will be identified via UK HE Institutions and peer group networks. Only academics teaching within graphic design will be contacted. Graphic design practitioners will be identified via peer group networks within industry and education. Participants will be approached via an emailed covering letter and information sheet which explains the nature of the research. See attached. Participants are being targeted. The questionnaire is being sent to named individuals identified through their personal email addresses either in HE institutions or industry practice. Participants are asked to identify themselves via job role on the questionnaire. This will act as the screening mechanism. If neither box is ticked – academic or industry practitioner – the questionnaire will be disqualified. See answer to Q 4iii regarding anonymity. Expand as necessary

4.iii	How will you ensure the anonymity of your research participants? If it is not possible to guarantee anonymity what strategies have you in place?
	Names and personal information regarding participants are not required and will not be collected. Information collected within the research will relate to job titles/roles.

	Names and personal information regarding participants are not required and will not be collected. Information collected within the research will relate to job titles/roles. The questionnaire will be written by the research student to be GDPR compliant as SurveyMonkey do not write questionnaires but use data supplied. The questionnaire will ask for generic roles not titles to distinguish academics from practitioners. E.g. Academic or Industry Practitioner. Subjects will <u>not</u> be asked for their specific job title e.g. Senior lecturer graphic design or Junior Graphic Designer. As the questionnaire contains free text answers the questionnaire will stipulate that subjects should not name their institution or agency or give personal identifiable information. This will not be used within the research anyway. If a subject should provide personal information it will only affect issues of confidentiality in terms of storing the data. In this instance the data storage protection will manage this. See answer to question 4.iv Any identifiable information that is required/requested will be codified within the thesis e.g. Participant A, B etc. All identifying information will be redacted. Expand as necessary

4.iv	Confidentiality and data security: How will you ensure that your data is secured
	All data – emails, covering letter, questionnaire will be stored on a secure USB stick. The Questionnaire will be managed via Survey Monkey, an online platform, which has adopted the General Data Protection Regulations (GDPR) of 2018. Expand as necessary

For Office Use Only: Format approved 26/2/20	
Date of Final Copy of Application Form	
Date of Approval/Outcome Letter	

Appendix 2

Ethical Approval Confirmation Letter

UNIVERSITY OF WOLVERHAMPTON

24th April 2020

Researcher: Carol Meachem

Title of Research: An Investigation into the Role of Creativity in Graphic Design

Decision: Your ethics application has been **APPROVED**

Dear Carol

The Faculty Ethics Committee has approved your amended application.

Please ensure that you are conversant with the latest guidelines on recruiting research participants and data security. See the Ethics Guidance web pages https://www.wlv.ac.uk/research/research-policies-procedures--guidelines/ethics-guidance/

If you make any substantial changes to your research, you will have to complete a new request for ethical approval.

This letter only relates to ethical issues and has no bearing on other aspects of your research, such as methodology and theoretical framework.

Please do not hesitate to contact the relevant representative for your subject on Faculty Ethics Committee if you have any questions.

We wish you the very best with your research.

Yours Sincerely

[redacted]

[redacted]

Faculty Research Administrator

On behalf of Faculty of Arts, Business & Social Sciences Ethics Committee

Dean: Mr Miceal Barden LLB(Hons) PGDip LLM FHEA
University of Wolverhampton, Faculty of Arts, Business & Social Sciences, Mary Seacole Building, Nursery Street
City Campus Molineux, Wolverhampton WV1 1AD United Kingdom
T: +44 1902 321000 or 321789 E: enquiries@wlv.ac.uk

Appendix 3

Covering Letter (Email) /Participant Information Sheet

Dear Participant

An Investigation into the Role of Creativity in Graphic Design

I would like to invite you to take part in an approved research study being undertaken in support of a PhD thesis. This research has been approved by the CADRE (Centre for Art, Design, Research and Experimentation) Ethics Committee at the University of Wolverhampton. Before you agree please read through this information sheet carefully. It will explain why the research is being undertaken and what it will involve for you. If you need any further information, please contact me using the details provided below.

The purpose of this study

The purpose of this study is to establish current understanding of creativity and the role of creativity within the discipline of graphic design. The aim of the study is to support future practice and education research initiatives within graphic design by developing a theoretical framework from which to engage in further discussions with both practitioners and educationalists. The scope of the study includes a representative sample of academics teaching on graphic design programmes in UK institutions of Higher Education and graphic design practitioners working within the UK.

Why have I been chosen?

You have been chosen because you work either in the discipline of graphic design within a UK Higher Education institution or as a graphic design practitioner currently working within the UK.

Do I have to take part?

It is entirely your decision whether or not you choose to take part in this study. Submission of a completed questionnaire will be considered your consent to take part in the study.

Will the information I provide be confidential?

All information provided by you will be dealt with as confidential and anonymous. Some generic information will be required about you and the organisation you work for to ensure it fits the criteria of the study.

What are the risks?

There are no anticipated risks associated with participating with this study.

What are the benefits?

Whilst there will be no immediate benefits for the participants of this research, it is anticipated that the research study will provide insights and possible recommendations for future practice within graphic design. Results of the study can be supplied to participants on request.

What will happen to the results of the study?

The results of the study will be summarised and reported within the final PhD thesis. You and your organisation will be included anonymously.

Thank You for taking part in this study.

Carol Meachem, CADRE Research Student, Faculty of Arts, Business and Social Sciences, University of Wolverhampton
Email e-mail address redacted

Dr Louise Fenton (Director of Studies)
Email: e-mail address redacted

The completion date for this questionnaire is 30 June 2020, any responses received after this date will not be included in the study.

Appendix 4

Graphic Design Survey Questionnaire (6pp)

The Role of Creativity in Graphic Design Survey

The following survey asks questions about creativity, creativity in higher education and creativity in industry practice. The purpose of this study is to investigate the role of creativity within the discipline of graphic design.

If you believe some questions do not apply to you indicate N/A (not applicable) in the appropriate box.

The free text boxes expand as necessary.

The survey consists of 14 questions and will take around 15 minutes to complete.

1. Please indicate which title best describes your current job role. Tick more than one box if appropriate.

- ☐ Academic (includes L, SL, PL, Reader, Prof.)
- ☐ Industry Practitioner
- ☐ Technician

2. Please state how would you define creativity and give examples.

3. Do you think creativity is important in graphic design practice in general?

- [ ] Yes
- [ ] No
- [ ] Don't Know
- [ ] Sometimes

Give reasons.

4. Do you think creativity is an important part of ***your*** graphic design practice?

- [ ] Yes
- [ ] No
- [ ] Don't Know
- [ ] Sometimes

Give reasons.

5. Is the client involved?

- [ ] Yes
- [ ] No
- [ ] Don't Know
- [ ] Sometimes
- [ ] N/A

Give reasons.

6. What creative activities do you undertake as a graphic designer? Give examples.

7. Do designers engage with creativity in a different way in a digital rather than an analogue environment?

- [ ] Yes
- [ ] No
- [ ] Don't Know
- [ ] Sometimes

Give reasons.

8. Do you think student creativity can be facilitated?

- [ ] Yes
- [ ] No
- [ ] Don't Know
- [ ] Sometimes
- [ ] N/A

Give examples.

9. Give examples of how you would evaluate student work in terms of creativity.

10. Should students be involved in industry practice e.g. live briefs, work experience?

- [ ] Yes
- [ ] No
- [ ] Don't Know
- [ ] Sometimes

Give reasons.

11. Should industry practitioners be involved in curriculum development?

- [ ] Yes
- [ ] No
- [ ] Don't Know
- [ ] Sometimes
- [ ] N/A

Give reasons.

12. Are there tensions between being creative and commercial?

- [ ] Yes
- [ ] No
- [ ] Don't Know
- [ ] Sometimes
- [ ] N/A

Give reasons.

13. Is there a common understanding between education and industry regarding what constitutes creativity in graphic design?

- [ ] Yes
- [ ] No
- [ ] Don't Know
- [ ] Sometimes
- [ ] N/A

Give reasons.

14. Do you think there is enough of a dialogue between educationalists and industry practitioners regarding creativity?

- [ ] Yes
- [ ] No
- [ ] Don't Know
- [ ] Sometimes
- [ ] N/A

Give reasons.